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## **Germany and NATO Centres of Excellence**

*A Relevant Contribution to Transformation  
or Rather a Big Misunderstanding?*

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## ***Disclaimer***

The views expressed in this thesis are the author's alone, and do not necessarily represent the views of the German Ministry of Defence or any other part of the German government, the Norwegian Defence University College or any other organisation.

*Summary*

*Abstract*

Keywords:

**List of Abbreviations**

ACT	ALLIED COMMAND TRANSFORMATION
ACO	Allied Command Operations
ARRC	Allied Rapid Reaction Corps
CAOC	Combined Air Operations Centre
CCOE	CIMIC COE
CFI	Connected Forces Initiative
CIMIC	Civil-Military Cooperation
CoAS	Chiefs of Air Staff
COE	Centre of Excellence
COE CSW	COE for Operations in Confined and Shallow Waters
COEs	Centres of Excellence
ENTEC	Euro NATO Training Engineering Centre
FUNC MOU	Functional MOU
GAFAOC	German Air Force Air Operations Command
HQ	Headquarters
IGO	International Governmental Organization
JAPCC	Joint Air Power Competence Centre
MILENG COE	Military Engineering COE
MOU	Memorandum of Understanding
MOUs	Memoranda of Understanding
NCA	NATO Command Arrangements
NCS	NATO Command Structure
NFS	NATO Force Structure
NGO	Non-Governmental Organization
NRDC	NATO Rapid Deployment Corps
NSJEC	NATO Senior Joint Engineer's Conference
OP MOU	Operational MOU
RFAS	Reaction Air Force Staff
SACT	Supreme Allied Commander Transformation
SDI	Smart Defence Initiative
SHAPE	Supreme Headquarters Allied Powers Europe
SN	Sponsoring Nation
SNRs	Senior National Representatives
SNs	Sponsoring Nations
SOP	Standard Operating Procedure
TOR	Terms of Reference

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## 1. Introduction

*Centres of Excellence have gathered a lot of momentum and visibility over the last years. However, they remain to be one of the most misunderstood organizations in NATO and Sponsoring Nations*<sup>1</sup>. (NATO, 2012c, p. 1)

### 1.1 Background

The evolution of NATO accredited Centres of Excellence (COEs) is closely related to the restructuring of the NATO Command Structure in the wake of the Prague Summit in 2002. Established as multinational sponsored military organizations, Centres of Excellence belong to a wider framework that supports NATO's transformation process. As a matter of policy these Centres do not, however, form part of the NATO Command Structure. They are rather independent and only accountable to their Sponsoring Nations (SNs).

Since the first Centre of Excellence (COE) – the Joint Air Power Competence Centre – has been established in Germany in December 2004, they have gained much attention from a specific audience and their number has constantly increased. As of writing 18 COEs have been established in 14 NATO countries with a total of approximately 775 posts of which almost 600 are filled (NATO, 2013b, p. 4). Additionally, proposals for three more Centres to come within the next few years are already at dispose<sup>2</sup>. From the very beginning, almost all Allies have been actively engaged in varying degrees to make their contributions and provide resources in form of both financial means and military personnel. By the end of 2012, a total of 24 NATO members are committed to this unique kind of multinational cooperation outside the NATO Command Arrangements. Most notably, Germany's engagement within this concept is above-average. While being represented in 11 of 18 NATO accredited COEs, Germany is Framework Nation for four COEs, of which three are located in Germany<sup>3</sup>.

However, the principle of multinational cooperation among NATO countries is not new and was already reflected in NATO's Strategic Concept of 1991. Under the heading of *The Alliance's new force posture* the concept pointed out the increasing importance of multinational forces within collective defence arrangements and emphasized the potential benefits of a "highly integrated, multinational approach to specific tasks and functions" (NATO, 1991). An illustrative example is the creation of the Allied Rapid Reaction Corps (ARRC) which has been established

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<sup>1</sup> Sponsoring Nations are those NATO members who are sharing the expenditures of a Centre of Excellence as well as contributing with own personnel

<sup>2</sup> As of writing the Centre of Excellence for Military Policing (MP) in Poland is in its final MOU negotiations.

<sup>3</sup> The CIMIC COE in Enschede is hosted by The Netherlands with both nations as Framework Nations.

in 1992 in Germany, consisting of a multinational staff of some 300 personnel from almost all Allies by that time (Deni, 2007, p. 34), and with Great Britain as Framework Nation. Ten years later the ARRC then served as a kind of blueprint for the creation of further “ARRC-like, corps-size entities” (Deni, 2007, p. 46) – the NATO Rapid Deployment Corps, graduated by their status of readiness in High and Low Readiness Forces – of which NATO was in urgent need in order to meet its level of ambition<sup>4</sup>.

Although the turn towards multinationality after the end of the Cold War was initially viewed as a hallmark to demonstrate the Alliance’s undaunted cohesion and solidarity, it also reflected a way to use scarce defence resources more efficiently (NATO, 1991) – something which more and more gained attention and temporarily culminated in NATO’s *Smart Defence Initiative*.

The Smart Defence Initiative (SDI) and its complement, the *Connected Forces Initiative*, form part of a concept that was termed as *NATO Forces 2020*. The concept as a whole was introduced during the Chicago Summit in 2012 and is an expression of NATO’s latest commitment regarding its ongoing capability insufficiency.

Considered as a new mindset (Rasmussen, 2012a) Smart Defence reflects the Alliance’ solidarity and builds on multinational approaches and innovative solutions to deliver and sustain critical capabilities. This mindset virtually embodies multinational cooperation which, in turn, is simultaneously also a general and guiding principle in operating a COE. As an official of the Allied Command Transformation (ACT), one of the two Strategic Commands of NATO, pointed out in 2012: “NATO COEs have been practicing the principles of Smart Defence since 2005, long before the phrase became popular in NATO as a way to describe the cooperation between alliance nations, partners, industry, academia, NGOs, IGOs, etc. (to name just a few) and NATO” (Wedge, 2012, p. 5).

By contrast, the Connected Forces Initiative (CFI) is seeking to improve the interoperability of NATO forces, including expanded education, training and exercises. Initially, it was already presented in a speed by NATO’s General Secretary Anders Fogh Rasmussen during the 48<sup>th</sup> Munich Security Conference in February 2012 where he identified the Centres of Excellence – together with NATO’s own education facilities<sup>5</sup> – as unique opportunities to enhance both training and education for NATO forces. He even went a step further by prompting the question “how [NATO] can get even more value out of them, and perhaps also open up the extensive

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<sup>4</sup> three corps-size operations at once – one within NATO territory, one adjacent to it, and one farther out-of-area (Deni, 2007, p.45)

<sup>5</sup> the NATO School (DEU), the Joint Warfare Centre (NOR) and the Joint Training Centre (POL)

range of national facilities” (Rasmussen, 2012b). Consequently, COEs have gained much attention and were identified as a potential hub for education and individual training among 23 other recommended projects within the Smart Defence Initiative.

However, while multinational cooperation in the guise of NATO Forces 2020 is at premium in times of austerity, the comprehension of a COE is rather unclear as indicated by the initial quotation of this chapter. The quotation was taken from the After Action Report of the COE Directors’ annual Conference at Headquarters (HQ) Supreme Allied Commander Transformation (SACT) in October 2012 that had its focus on the relevance of COEs to their Sponsoring Nations and NATO. The COE Directors concluded that their organizations still remain highly misunderstood and pointed out that there is the necessity to qualitatively change both the individual and collective output of their COEs in order to be “more responsive and relevant to NATO and SNs’ needs” (NATO, 2012c). Thus, COEs are set under pressure by their ‘customers’ in terms of their relevance (i.e. appropriateness). From a Sponsoring Nation’s perspective one could also phrase it with the words of former U.S. Secretary of Defence Charles E. Wilson (1953 – 1957): “How to get more bang for the bucks?”

## **1.2 Research Problem and Purpose Statement**

At first sight, the evolution of Centres of Excellence and their suggested value within both NATO initiatives looks like an ongoing success story. At the same time, Centres of Excellence have obviously not been able to meet the demands and expectations of their Sponsoring Nations in the ongoing transformation process, leaving them somehow with a label of being irrelevant.

Nevertheless, most nations still provide resources on running an obviously unpromising and irrelevant kind of business. Few nations, however, have so far removed personnel from some COEs or refrained from a potential participation at all – whether as a response to financial constraints or as a response to assumed irrelevance remains open. And indeed, COEs are facing a growing dilemma. On the one hand, they are supposed to promote their capabilities and achievements while on the other hand they have to justify limitations and manage customer’s expectations (NATO, 2011c, p. 3). As a German officer who was interviewed for this study remarked with regards to the Joint Air Power Competence Centre’s capabilities in respect of training support for the German-Netherlands Corps: “We can help them to create their air-related scenario as they don’t have the AOC<sup>6</sup> cell. [...] As soon as I get downgraded [...] to act as [their]

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<sup>6</sup> The Air Operations Centre (AOC) cell is the liaison element to a component command.

drafting group [...], then things go wrong” (Interview Theuerkauf). Thus, being relevant and managing a proper understanding of relevance is getting an increasingly important attribute in contemporary multinational cooperation.

However, relevance is in the eye of the beholder and refers to an individual and cognitive assessment whether something is potentially capable to contribute to the achievement of one’s objectives. Thus, the relevance of Centres of Excellence finally depends on the extent to which needs and demands of their organizational environment<sup>7</sup> indeed coincide with the output that is provided by the COEs. And as COEs are yet dependent on and constrained by their Sponsoring Nations – not solely in terms of resources but also because SNs account for their mission as well as for their overall content of work – it seems odd that the same SNs have so far not been able to make their COEs more responsive and relevant to their own demands. This overtly contradiction needs further investigation in order to grasp the relevance that NATO accredited Centres of Excellence may have in the transformation process in general, but also for their Sponsoring Nations in particular. In order to analyse the question of relevance from the perspective of Sponsoring Nation I have chosen Germany, one of the most committed NATO members with regard to the COE concept.

The purpose of this study is to explore the relevance and nature of NATO accredited Centres of Excellence in order to gain a more thorough understanding of their role in NATO’s ongoing transformation process. For my case study I have chosen to focus on those Centres for which Germany has assumed responsibility as Host Nation. I will analyze how relevance is generated in, and shaped by the specific environment of these Centres of Excellence and how it is perceived by the corresponding COEs. Therefore the study seeks to answer the following research question:

***How does the interaction between German hosted Centres of Excellence and their specific environments influence the Centres’ relevance for their Sponsoring Nations in the NATO transformation process?***

By application of organizational theory the research question is operationalized and geared towards providing a feasible conceptual framework that could be used to guide the further analysis.

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operations and coordinates with other components and Services

<sup>7</sup> In this order: NATO entities (such as ACT, ACO), Sponsoring Nations and Other Partners (i.e. any nation, organization or agency that uses the service and/or products provided by a COE other than a Participant or NATO entity such as Industry, Academia, IOs and NGOs)

My initial assumption is based on findings that Deni (2007) made in the context of the evolution and implementation of the NATO Rapid Deployment Corps (NRDCs) as well as by the application of organizational theory, in particular Resource Dependence Theory. Against this backdrop I posit that Centres of Excellence, like all organizations, strive to survive. Initially established to gain prestige, to exert influence, or to justify one's own organizational structure in times of shrinking defence budgets, their relevance has been questioned in particular with regard to their appropriateness and effectiveness. However, as COEs are aiming at furthering their mandate as they perceive it to be best; protecting their autonomy in order to maintain their scope; and minimizing organizational dependency to avoid uncertainty, they must be at the same time responsive to external demands and constraints and conform to their organizational environment.

The empirical basis for the analysis consists of six semi-structured interviews that have been conducted with German key personnel, currently working or having worked inside that sector. The interviews and the subsequent analysis have been informed by using a theoretically derived set of categories that forms the conceptual framework of this study. This approach goes back to the work of Gläser and Laudel (2010) in their book *Interview of Experts and Qualitative Content Analysis*.

Moreover, unclassified official documents related to the corresponding Centres of Excellence such as Periodic Assessment Reports and Memoranda of Understanding (MOUs) as well as conference presentations, annual reports or newspaper articles were used in order to get as comprehensive a picture as possible.

### **1.3 Short Literature Review**

Many military and political studies have been dealing with the concept of multinational cooperation which is often used interchangeably with the multilateralism (Bredow, 2008, p. 260). However, regarding military cooperation, multinationality mostly denotes an enduring and coordinated collaboration of soldiers of various countries that are working together in a military environment such as a headquarters (Gareis, 2006, p. 360). Military multilateralism, in contrast, does not solely denote a military organization which is founded on an official intergovernmental relationship among a group of at least three countries but also includes a legitimate mandate of the international state-community (Bredow, 2008, p. 261; Ruggie, 1993, p. 8).

Thus, both concepts can be separated by their specific focus. Scholars use sociological and psychological approaches, geared towards gaining insights into primarily cultural aspects of military multinationality (Gareis, 2012; Gareis, Abel, & Richter, 2006; Leonhard & Gareis,

2008). These studies were primarily conducted on the level of multinational headquarters, i.e. on an operational or tactical level. By contrast, theories of international relations are often used to address military multilateralism at the political-strategic level (Baumann, 2000; Ruggie, 1993; Schimmelfennig, 2005). These studies are directed towards explaining motives and interests of states regarding the establishment and maintenance of multinational structures. The focus is first and foremost placed on issues such as the preservation of military capabilities, military stabilization and multinational integration, and finally international operations (Gareis, 2012, p. 351). However, while studies on multilateralism may help to explain the behavior of a state at the political-strategic level, they are regarded as less useful to explain its behavior on lower levels such as the military-strategic, operational or even tactical level. By contrast, studies on multinationality have been conducted on these lower levels but with focus on cultural aspects. Finally, there are studies dealing primarily with the evolution and change of NATO's command and/or force structure such as Deni (2007) or Young (1997, 2000). Although these studies do not merely focus on issues of multinationality, they offer useful hints and have informed the theoretical framework for this study.

#### **1.4 Scope and Limitation**

I have chosen *German hosted Centres of Excellence* as my case for at least two reasons. First of all, the scope of a master thesis does not allow for an analysis of all 18 NATO accredited COEs. Secondly, as already mentioned and closely related to the first reason, Germany's commitment to the concept of COEs is outstanding. In order to keep the analysis manageable I decided to focus on those COEs where Germany is Host Nation, in particular the Military Engineering Centre of Excellence and the Joint Air Power Competence Centre as it was possible to get access to a wide range of information. The Centre of Excellence for Operations in Confined and Shallow Waters to verify findings but not discussed in the same detail as the two other COEs.

As *relevance* is a central theme in this study two limitations regarding its scope have to be noticed.

First of all, in order to gain a German perception of relevance I have chosen an approach that must be viewed as subjective insofar as the German perspective is primarily shaped by official documents, produced by the corresponding COEs themselves, and the opinion of high ranking German officers that are currently working or that have worked inside this sector since 2005. This means I will literally look through the 'eyes of the corresponding' Centres.

The second limitation concerns the specific content of being relevant for a particular group of customers. This kind of analysis has to be done by each COE individually and is not covered in

this study. The focus is rather on the general interaction between German hosted COEs and their organizational environment.

Finally, this study will not touch upon the legal framework that is governing NATO accredited Centres of Excellence. More details regarding this issue can be found in the COE establishment manual, Annex A (Wedge, 2012).

### **1.5 Outline of the Thesis**

Chapter 2 provides the background information on the evolution of NATO accredited COEs and military multinational cooperation. It consists of three parts. First I will describe some reasons in the context of NATO transformation that account for the evolution of NATO accredited COEs before I elaborate on NATO's COE concept. After that I will briefly describe the concept of NATO Forces 2020 before I finally describe the evolution and implementation of the NATO Rapid Deployment Corps as kind of a more tangible multinational cooperation approach.

Chapter 3 explains the conceptual framework of this study drawing on organizational theory. It consists of three parts. In part one I will give a brief overview over organizational theory with a focus on those perspectives that view organizations as organic collectivities in the sense of social groups acting as a collaborative object in a larger system of relations. Part two describes my analytic model which has been adapted from the Congruence Model for Organizational Analysis (Nadler & Tushman, 1982) and explains the link between this model and the term relevance.

Chapter 4 lays out the research design and comprises four parts. The first two parts justify the qualitative research approach and the case study strategy. Part 3 describes how data has been collected and analyzed.

Chapter 5 describes the case study with two embedded sub-units: The Military Engineering Centre of Excellence and the Joint Air Power Competence Centre. Each sub-unit is analyzed by applying the analytical model as described in chapter 3. Finally, I will provide the conclusion of the case study.

## **2. Brothers in Arms – NATO Transformation and Multinational Cooperation**

The purpose of this chapter is twofold. First, it aims at providing both the historical and the technical background regarding the evolution of Centres of Excellence in order to enable the reader to better understand the conceptual framework in chapter 3 and to lay the foundation for the case study in chapter 5. Secondly, the chapter covers three aspects of multinational cooperation. First, I briefly elaborate on the contemporary concept of NATO Forces 2020, in particular the Smart Defence Initiative. Thereafter, two categories of multinational cooperation (vertical and horizontal) are described in general terms as well as three organisational concepts for multinationality (lead nation, framework nation, and full integration). Finally, I elaborate on a more specific example of multinational cooperation – the evolution of the NATO Rapid Deployment Corps which was initiated just a few years before the first Centres of Excellence were established – in order to inform my conceptual framework.

### **2.1 NATO Transformation and the Emerge of Centres of Excellence**

This section is to provide the essential background information about Centres of Excellence and how they have evolved under the umbrella of NATO transformation which is inseparably tied to the creation of NATO's Allied Command Transformation. Thus, the establishment and alignment of ACT is initially described before the focus is directed to COEs.

#### **2.1.1 Allied Command Transformation – From a Forcing to a Leading Agent of Change**

NATO's summit on 21 November 2002 in Prague was initially planned as an enlargement summit (Cornish, 2004, p. 64). However, the terrorist attacks of 11 September 2001 provided an initial catalyst for transforming NATO (Goodpaster, 2004, p. VII) almost 11 years after the Cold War was declared over.

Unlike NATO's first two rounds of reforms after 1990 which were primarily characterized by "the gradual adaptation of NATO to the new security situation in Europe" (Hilde, 2011b, p. 129), the Prague summit, as Hilde puts it, "represented a watershed" (2011b, p. 129) regarding the intention of going out-of-area and the associated radical rearrangement of the whole NATO Command Structure. The latter was also stressed by Barry (2003, p. 1) who concludes that the summit "was a major milestone in the evolution of alliance command structure and future military force posture". Whether the summit is regarded as *watershed* or *milestone*, it obviously "gave the Alliance a new and clear orientation" with respect to "combating new risks with new forces and new structures" (Mahncke, Thompson, & Rees, 2004, p. 65).

Among the decisions agreed upon by NATO Heads of State and Government during that Summit, three have had far-reaching consequences. First, it was concluded to establish the NATO Response Force (NRF). Secondly, the Defence Capabilities Initiative (DCI), largely considered inadequate (Teutmeyer, 2012, pp. 148-149), was to be substituted by the more focused and specific Prague Capabilities Commitment (PCC). And finally, NATO's military command arrangements<sup>8</sup> (NCA) were to be streamlined (NATO, 2003b, p. 73).

As part of this streamlining process, the agreement to replace the former Allied Command Atlantic by an entirely new strategic command – Allied Command Transformation (ACT) – was most significant (Tuschhoff, 2005, p. 128). Alongside with its *operational* counterpart, Allied Command Operations<sup>9</sup> (ACO) in Belgium, ACT was created as the first-ever NATO *functional* command, armed with the *vision* of being NATO's "forcing agent for change" (Maisonneuve, 2004, p. 8) and completely dedicated to the enduring process of transformation. Following ACT's first Chief of Staff, Canadian Lt Gen M. Maisonneuve, the Headquarters (HQ) of Supreme Allied Commander Transformation (SACT) "will take new and innovative ideas, develop them into operational concepts and capabilities, and bring them to a transforming NATO force" (Maisonneuve, 2004, p. 7).

In order to achieve these objectives Maisonneuve highlighted the benefits of a "transatlantic two-way street" (Maisonneuve, 2004, p. 9) that allows for the exchange of experiences, innovations, and promising ideas. For whilst HQ SACT was co-located with its former functional vanguard, the 1999 established U.S. Joint Forces Command<sup>10</sup> (JFCOM) in Norfolk, all additional command elements that are to assist the transformation efforts, are located in Europe. They include the Joint Warfare Centre (JWC) in Stavanger (Norway), the alleged "jewel in our transformational crown" (Maisonneuve, 2004, p. 9) as Maisonneuve puts it; the Joint Force Training Centre (JFTC) in Bydgoszcz (Poland); the Joint Analysis and Lessons Learned Centre (JALLC) in Monsanto (Portugal); and the Undersea Research Centre (URC) in La Spezia (Italy). By that time, however, Centres of Excellence were not yet established albeit Maisonneuve was aware of at least two already developing COEs – the Joint Air Power Competence Centre in Germany and the COE Defence against Terrorism in Turkey. However, roughly nine years later at the Chief of Transformation Conference in December 2012, Maisonneuve's present successors as ACT's

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<sup>8</sup> NATO Command Arrangements refer to the NATO Command Structure and the NATO Force Structure as well as to the operational concepts that bring them together.

<sup>9</sup> formerly Allied Command Europe (ACE)

<sup>10</sup> In January 2011, the plan to disestablish US JFCOM due to budget saving measures was officially approved. On 4 August 2011, JFCOM cased its flag colours and was officially disestablished on 31 August 2011. (Wikipedia, 2013)

Chief of Staff, British Vice Admiral T. Johnstone-Burt, coined “the COEs the crown jewels of NATO” (MILENG COE, 2013). This might be taken as a first but still vague clue that COEs have been able to even extend the two-way street into a highway.

HQ SACT became effective on 19 June 2003 with US Admiral Giambastiani as first SACT<sup>11</sup>. Until 2009<sup>12</sup> SACT had a dual-hatted function as he was simultaneously the Commander of US Joint Force Command which was “spearheading similar [transformation] efforts since 1999” (Giambastiani & Forbes, 2005, p. 38). It was therefore expected that this constellation could offer synergy effects and opportunities for both headquarters (Maisonneuve, 2004, p. 8). Others claim that this was just the Alliance’s attempt to arrange European military forces along the lines of their American counterpart (Tuschhoff, 2005, p. 129). Teutmeyer (2012, p. 143) points out that while there have not been, from an US-American point of view, any tasks that European military forces should have assumed most eminently, the Americans were permanently endangered to be abandoned in the absence of proper European military capabilities. However, as Giambastiani and Forbes concluded in in 2005:

Transformation is not only about developing new weapons systems or improving capabilities, but rather a process and mind-set focused on the adaption of unexpected challenges within a dynamic, joint environment. This evolution has a significant impact on military doctrine organization, capabilities, training, education and logistics.  
(Giambastiani & Forbes, 2005, p. 38)

However, given that transformation is a process rather than an end state it remains indisputable that ACT’s top priority is dedicated to the perpetual improvement of the Alliance’s military capabilities. Consequently, ACT’s vision statement has not substantially changed within the last 10 years as ACT unswervingly aims at being “NATO’s leading agent for change, driving, facilitating, and advocating continuous improvement of Alliance capabilities to maintain and enhance the military relevance and effectiveness of the Alliance” (NATO, 2013a). However, ACT has slightly changed the wording from *forcing* to a less coercive *leading* agent for change. This may indicate that the initial phase is accomplished and that ACT is now trying to preserve the status quo. Another clue for this suggestion can be found on ACT’s website where the Command views itself as an innovation hub in the whole wheel of transformation rather than as

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<sup>11</sup> Initially, he took command as SACLANT in October 2002, but then served as SACT until august 2005.

<sup>12</sup> Since 09 September 2009 the Supreme Allied Commander Transformation (SACT) is a French officer as a consequence of France re-joining of the NCS in mid-2009.

the exclusive and only provider of good ideas. Through the innovation hub, ACT is aiming at “bringing together people with different backgrounds or perspectives [in order to generate] better understanding of the issues, and fosters innovation” (NATO, 2013a). In this respect Centres of Excellence are in a unique position to contribute to this innovation hub.

Additionally, the former SACT, French General Stéphane Abrial, described his vision for transformation in a key note speech, given at the Chiefs of Transformation Conference in late December 2009 that reads as follows: “In a time of tightened defence budgets, increased threats and current combat operations, it is important that transformation focus on building upon what already exists, and especially what already exists within member nations” (NATO, 2009b, p. 3). One year later during the fifth Chief of Transformation Conference<sup>13</sup>, which had as its theme “Transformation – The Way Ahead”, General Abrial stressed the increased importance of COEs against the backdrop of an ever decreasing number of Headquarters and available resources within the NCS (COE CSW, 2013). However, this was not meant as a means of compensation for less and less posts in the NCS but as an opportunity for NATO to gain access to expertise at no costs.

Against this background it is readily understandable why Centres of Excellence have gained much attention over the last years. Moreover, the continuous streamlining process of the NATO Command Structure not only allows for saving and redirecting money to existing shortfalls within the Alliance. Rather, it has at least also one disadvantage for Alliance member states. For whilst the NATO Command Structure has been significantly reduced in terms of Headquarters<sup>14</sup> and the total number of positions<sup>15</sup> since the end of the Cold War, the number of NATO members has almost doubled<sup>16</sup>. According to Tuschhoff NATO member states have always viewed their national contribution to, and representation within the NCS as an opportunity to gain access to essential decision-making processes as well as to exert influence on that process. Hence, the pervasive cuts in the NCS also brought about a loosening of links between national and multinational structures (Tuschhoff, 2005, p. 129). Following one of my interviewees, the Executive Director of the JAPCC, NATO members still contest for bids in the NCS while they

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<sup>13</sup> 14 - 15 December 2010

<sup>14</sup> In 1997 a reform was initiated to reduce HQs by 70% from 65 to 20. The Prague Summit 2002 initiated again a reduction by 40% down to 11 HQs (Weinrod & Barry, 2010, pp. 8-12). The Lisbon Summit 2010 brought about another reduction of military headquarters from 11 to 7 (Iffert, 2012)

<sup>15</sup> According to Hilde their number has been reduced from 24.500 Peacetime Establishment (PE) in the late 1980s to 13.000 in 2010 (Hilde, 2011, p.128). The Lisbon Summit brought about a further reduction of 30 percent, from roughly 13000 to approximately 8800 post (Iffert, 2012)

<sup>16</sup> After the first round of enlargement the number of members increased from 16 to 19 in 1999. After the second round the number climbed up to 26 members in 2004, and the last round so far brought about two new members in 2009, resulting in a total of 28 members.

are at the same time reluctant to provide personnel to COEs. Of course, nations are encouraged not to fill COE posts at the expense of NATO billets but in reply of a question concerning this kind of compensation, he points out:

That's exactly what I'm constantly trying to tell the Nations. [...] I always ask them: Where do you have more influence regarding the development of NATO? If you place a Lieutenant Colonel as subject matter expert in the JAPCC, working on a topic that is important for you? Or is it here in the CAOC<sup>17</sup> where he is processing his SOPs<sup>18</sup>? Theoretically everybody would nod approval and say: Yes, principally you are right. However, the realization is difficult (Interview Wundrak).

To conclude so far, Allied Command Transformation has been established as a result of the Alliance's streamlining process in the past decade. Initially conceived as NATO's forcing agent for change, ACT has adopted the slightly attenuated role of being NATO's leading agent for change. As such, ACT is charged to enable the transformation of NATO forces by focusing on the improvement of Alliance capabilities. However, in times of austerity transformation is supposed to focus on those solutions that already exist within NATO and/or member nations. Against this background Centres of Excellence have gained much attention as they simultaneously offer an opportunity and attractive shortcut to gain a foothold in an ever shrinking NATO Command Structure.

### **2.1.2 COEs – Right in the thick of it? – or – Just on the sidelines?**

In chapter one Centres of Excellence have been introduced as multinational sponsored entities that do not belong to the NATO Command Arrangements but rather form part of a wider community that supports the NATO transformation process. Moreover their apparent success story has been presented by briefly describing how they evolved over the last eight years. The aim of this section, therefore, is to create a more thoroughly understanding of the whole topic: What exactly is a NATO accredited Centre of Excellence and why did they emerge? Which principles and rules do they have to follow, and how is NATO accreditation granted? Finally, how is their work generally organized and who makes demands on them?

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<sup>17</sup> The Combined Air Operations Centre (CAOC) in Uedem belongs to the NCS and is adjacent to the JAPCC. The Executive Director of the JAPCC is simultaneously the Commander of the CAOC in Uedem.

<sup>18</sup> Standard Operating Procedures

In order to answer these questions I will elaborate on two important NATO documents that describe both the general COE concept (MCM-236-03) and define the accreditation criteria (IMSM-0416-04).

The first official use of the term Centres of Excellence can be traced back to the Meeting of NATO Defence Ministers on 06 June 2002. In their statement on the necessity of a new capability initiative<sup>19</sup> they also mentioned the establishment of a potentially multinational “Virtual Centre of Excellence for NBC Weapon Defence” (NATO, 2003c) which was then reiterated five and a half month later in the Prague Summit Declaration. Also worth mentioning is that just one year later both Supreme Allied Commanders (SACEUR and SACT) endorsed a report by the end of June 2003 that mentioned outsourcing as an option to fill functional gaps (JAPCC, 2006).

However, some more concrete details on COEs were first drafted in the MC 324/1, a document released by the Military Committee on 16 May 2003<sup>20</sup> that covers the NATO Command Structure in general, and provides some particular key tenets for the later concept and criteria development for Centres of Excellence. After the Military Committee had refined its initial idea, a second document was launched seven month later – known as MCM-236-03 – that frames the basic concept and drives the overall development of the COEs. Finally, the Military Committee agreed on some crucial accreditation criteria and published the corresponding document – coined IMSM-0416-04 – in June 2004. The latter two documents are not classified and essential to understand the very nature of NATO Centres of Excellence. As a starting point for further explanation I will quote the MCM-236-03 definition of a Centre of Excellence:

A COE is a nationally or multi-nationally sponsored entity, which offers recognized expertise and experience to the benefit of the Alliance, especially in support of transformation. It provides opportunities to enhance education and training, to improve interoperability and capabilities, to assist in doctrine development and/or to test and validate concepts through experimentation. (NATO, 2003a, p. 1)

While the first part of the definition covers the questions of what a COE might be, the second part lists the alleged most important tasks that a COE is supposed to perform. However, it is hardly surprising that the definition does not provide for explaining why COEs have emerged at all. According to Wedge (2012, p.5) many reasons may account for a Host Nation’s decision to

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<sup>19</sup> what was supposed to become the Prague Capability Commitment (PCC)

<sup>20</sup> MC 324/1 (Military Decision); MC 324/1 (Final) was endorsed 28 May 2004

offer a Centre of Excellence to NATO. Following ACT's Transformation Network Branch (TNB, 2012b), some nations may wish to retain or build-up special knowledge and/or capabilities which could be important for even more than one nation. Others just seek to improve existing capabilities or strive to conform with NATO procedures, doctrines and standards. Yet others want to receive a small share of NATO. Or, in order to put it more bluntly, I will quote a former COE director who participated in a NATO conference in 2005:

The COE topic came up during that conference. However, hardly anyone knew what it even was about. And as I asked [my German colleague] I was told: You will then get a NATO flag and CRONOS<sup>21</sup> (Interview Scholz).

Both items are obviously first and foremost a question of reputation. In this regard Wedge points out: "Please remind your politicians that the NATO flag looks much better outside [the COE's] own building than hidden in the corridor of a larger building. After all, they will be the ones posing with the flag in front of the television cameras" (Wedge, 2012, p.11).

Anyhow, the single most prevalent reason is still the duality between contributing to NATO on the one hand while being of value for one or more nations on the other hand (Wedge, 2012, p.5). Thus, to conclude at this point, establishing a COE is by no means a national one-way street.

### ***From the first idea over the establishment to the accreditation of a COE***

The idea to establish a new COE arises from either NATO itself, or a member state, or even a group of member states. Additionally, if a (multi-)national organization is already in place, it might be offered to the Alliance in order to gain additional NATO accreditation. A good illustration is the transformation of the CIMIC Group North HQ<sup>22</sup> into the CIMIC Centre of Excellence, which was officially inaugurated in July 2007. However, as Captain (N) Panknier, former Branch Head of the Transformation Network Coordination Cell (TNCC)<sup>23</sup> at HQ SACT and responsible, among others, for the coordination of COEs, points out: "In the initial phase we ask the nations whether they are willing to host a potential COE and many of them volunteered. Thus we organized everything in accordance with 'first come – first served'" (Interview Panknier). By contrast, ACT's current lookout for nations to provide a COE for Irregular

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<sup>21</sup> CRONOS is the abbreviation for Crisis Response Operations in NATO Operating Systems, a Windows-NT based information system to provide secure connectivity (up to NATO secret) between NATO and nations (Adams & Ben-Ari, 2006, p. 89)

<sup>22</sup> The CIMIC Group North HQ was founded in 2001 by six NATO members and thereafter formally activated in 2003. In 2005 the final decision to transform into a NATO COE was made by the Sponsoring Nations of which two thereafter withdraw their participation.

<sup>23</sup> Meanwhile, TNCC has been renamed into Transformation Network Branch (TNB).

Warfare is obviously not that successful. However, recently Latvia could be attracted to host a Strategic Communication COE which is currently in the concept development phase.

No matter who makes the suggestion, a promising idea has to be developed further into a concept by describing the area of specialization and by explaining how the Centre may support and contribute to NATO's transformation process. With respect to the second part of the presented COE definition, a potential COE has to fulfill at least three of the following tasks – frequently referred to as *pillars*: Education and Training (including exercise support); Analysis and Lessons Learned; Concept development and experimentation; and Doctrine development and standardization/ interoperability (Wedge, 2012, p.7).

The Transformation Network Branch (TNB) which forms part of HQ SACT is charged to prepare potential candidates and to support the establishment of new centres. By passing on best practices, giving legal advice, and/or providing moderation services (Wedge, 2012, p.4), TNB is the facilitator between NATO and the coming Host Nations. This is to ensure that the concept will finally gain acceptance by NATO (Wedge, 2012, p.10). Moreover, TNB is given responsibility to supervise the accreditation process and to conduct periodic assessments which are mandatory<sup>24</sup> for all COEs.

After the Host Nation has made its formal offer<sup>25</sup> to NATO, the concept is analysed at HQ SACT and assessed against the principles set out in the MCM-236-3. On approval the Host Nation then is supposed to conduct an information campaign<sup>26</sup> aiming at attracting at least five other nations (Wedge, 2012, p.12) to sponsor the centre with personnel and financial means. These campaigns, however, have “as much as we would like to deny it, [...] political dimensions” (Wedge, 2012, p. 11) According to Wedge, one dimension is “the unwritten reciprocal arrangement” (Wedge, 2012, p.11) of quid-pro-quo in the sense of: If you support us, we support you.

Finally, the Host Nation and the nations that have showed interest to participate in the COE have to negotiate two Memoranda of Understanding (MOUs) as well as the final concept. While the Functional MOU sets out the relationship between the COE and the Alliance, the Operational MOU regulates the relationship between the COE and the Nations that had finally decided to

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<sup>24</sup> The first periodic assessment (PA) is scheduled after 3 years, the second after 3-4 years, and the following after 4-5 years.

<sup>25</sup> a letter, signed by someone with sufficient authority (normally the Chief of Defence or on the political level)

<sup>26</sup> not only external but also internal, directed towards national representatives in order to use them as multipliers (Wedge, 2012, p.10)

participate in the COE. Subsequently I will briefly explain the principles that drive the final concept and the rules that govern the relationship between the concerned parties.

### ***Principles***

Manning generally rests on the decision by the Sponsoring Nations and should be geared to a joint perspective and multinational approach. For example, the CJOS<sup>27</sup> COE in Norfolk consists of 13 Sponsoring Nations (incl. the US as HN) with an actually 62 percent<sup>28</sup> share of multinational contributions. However, posts must not be filled at the expense of NATO billets. Generally, COEs are well-advised to promote and actively solicit multinational contributions. However, participation<sup>29</sup> is only open to NATO members whereas NATO partners such as PfP countries as well as IOs may support a COE as so-called Contributing Partners (CP). This has important implications because (full) participation entails both voting rights and the obligation to share costs and to detach personnel. By contrast, Contributing Partners have neither voting rights, nor any obligations; their contribution is subject to a Technical Arrangement (TA). Regarding funding arrangements it is a basic policy that COEs have to be funded at no expense for NATO – neither at the time of their establishment nor thereafter. Furthermore, the activities of a COE must be suited to provide tangible improvements to NATO capabilities and shall be consistent with NATO efforts. However, duplication of assets and resources, or competition with capabilities that already exist within NATO should be prevented. Finally, COEs are to comply with NATO doctrines, procedures and standards.

### ***Relationship***

NATO assigned COEs are neither part of the NATO Command Structure, nor are they under command and control of their Framework Nation(s)<sup>30</sup>. Rather, COEs belongs to their SNs and are directed by a Steering Committee (SC). The relationship between the COEs, its SNs and Allied Command Transformation is clearly regulated by the two aforementioned MOUs, even though ACT is assigned a general coordination role for the benefit of NATO. Within ACT, the Transformation Network Branch is tasked with this overall coordination function. Each COE defines its own Community of Interest (COI) which is a specific and individual environment of which each COE is part of. It constitutes a coherent network that comprises a

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<sup>27</sup> Combined Joint Operations from the Sea

<sup>28</sup> As of December 2011: 16 of 32 posts are multinational post. However, just 26 posts are filled including all 16 multinational posts.

<sup>29</sup> in terms of becoming a Sponsoring Nation

<sup>30</sup> Currently the CIMIC Centre of Excellence (CCOE) in Enschede (NLD) is the only COE with two Framework Nations.

collection of organizations – either as contributors or as customers or both at the same time – who jointly seek to leverage each other’s resources, and/or share expertise and information from across the Alliance in order to enhance capabilities (Wedge, 2012, p.36).

### ***Accreditation and Periodic Assessment***

A COE has been officially established as soon as both MOUs are signed by ACT and national authorities during a short and formal signing ceremony, usually held at HQ SACT. However, in order to gain NATO accreditation, the aspirant has to be assessed against both *mandatory* and *highly desirable criteria* as defined in the respective NATO document (IMSM-0416-04). While the former criteria must be continuously maintained<sup>31</sup>, the latter are less binding although a COE is expected to do its best to achieve them.

Mandatory criteria refer primarily to the four pillars as described in the second part of the COE definition. Thus COEs have to satisfy NATO requirements by supporting the development, promotion and implementation of new policies, doctrines, and concepts. They have to provide unique capabilities and their services and products are supposed to promote, enhance, and broaden interoperability and standardization in the Centre’s niche area of expertise.

A COE which fulfills at least three of those four tasks will have prospect of accreditation (Wedge, 2012, p. 7). The Transformation Network Branch that is responsible for the whole process is charged to prepare the candidates for approval from the Military Committee and the final endorsement from the North Atlantic Council (NAC). Both will be given after a silent procedure<sup>32</sup> has passed. As a consequence thereof the COE is granted status as an International Military Organization (IMO) in accordance with the Paris Protocol. As such the COE does not form part of any structure of the armed forces of its participating nations. Moreover, as the NAC grants the same IMO status to a COE as it does to a Supreme Headquarters, it could be therefore argued that COEs “are rather HQ SACT’s little siblings than ACT ‘offspring’ ” (Luis, 2010).

Periodically, COEs are to be (re-)assessed by HQ SACT (i.e. TNB) to ensure they comply with the aforementioned criteria and to ascertain that their products and services still meet the quality, standards, practices and procedures set out by NATO (NATO, 2004, p. 4). The assessment process consists of two parts and involves a formal on-side visit by TNB personnel. Prior to that

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<sup>31</sup> as applicable to COE’s services and products

<sup>32</sup> A silent procedure is one way of formally adopting texts. A draft version of the text is circulated among members who have a last opportunity to propose changes or amendments to a text. If no amendments are proposed (if nobody breaks the silence) before the deadline of the procedure, then the text is considered adopted by all members.

visit the COE has to fill out a self-assessment questionnaire. These questions span categories such as General Information, Work of the COE, Subject Matter Experts, Coordination and Programme of Work, Support and Infrastructure, and Safety and Security. Afterwards the processed questionnaire is discussed during the TNB visit.

The second part consists of the Periodic Assessment Report (PAR) written by TNB and based upon the COE's self-assessment and the impressions of the visit. Both documents are then forwarded to the Military Committee for the final approval. Should a COE fail to pass the periodic assessment, SACT will suggest necessary steps to mitigate identified shortfalls before reassessment or withdrawal of accreditation.

As of December 2012 all established Centres have been able to successfully pass their initial NATO accreditation procedure. Additionally, twelve COEs, which had been scheduled for their first re-assessment after 3 years, passed this test once again. Finally the Joint Air Power Competence Centre even did well in its second re-assessment in August 2012.

### ***Programme of Work***

Generally, a COE is expected to provide NATO with services and products which are not being made available by other NATO entities. Moreover, its activities are supposed to be in line with NATO efforts and provide tangible improvement to NATO capabilities (NATO, 2003a) .

The activities of a specific COE are set out in a plain document, which is termed the Programme of Work (POW). It spans one calendar year and incorporates a long-term perspective<sup>33</sup> on the basis of which subsequent Programmes of Work are further developed. Over the course of recent years the POW has been constantly improved through intensive interaction between ACT and COEs. As “the honest broker” (NATO, 2011a) ACT is responsible to coordinate the work of all COEs. Therefore, ACT's Transformation Network Branch has established a formal timetable for the POW development cycle (TNB, 2012a). Functioning as the main tool for the coordination of NATO inputs to the COE POW, this process is initiated at the beginning of a year and finalized nine or ten month later by obtaining the respective Steering Committee's official approval.

Throughout this period, NATO-wide inputs as well as requests from Sponsoring Nations and other entities asking for support are collected. These inputs respectively requests are discussed and coordinated between all COEs during an annual COE Workshop (WS). This includes, in particular, cross-functional projects where more than one COE is concerned. Thus, the POW development process is also supposed to provide a framework that allows for the identification

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<sup>33</sup> generally in accordance with an ACT 5 year plan (NATO, 2009a, p. 2)

of clusters or related projects as well as the establishment of a Community of Interest (NATO, 2011c, p. 3).

Regarding NATO inputs, the outcome of the workshop is further processed and, in keeping with the motto “No tasking only asking” (NATO, 2013c), converted into formal NATO Requests for Support (RFS)<sup>34</sup>. If approved by the appropriate COE’s Steering Committee these RFS form part of their following year’s POW.

In addition, COEs may also accept ad-hoc requests<sup>35</sup> in the course of the present year which have not been covered by the regular planning cycle. If accepted by the COE, these requests form part of their modified POW and are executed in the current year (NATO, 2013c). However, as these requests may compete for resources against already approved and budgeted COE POW items, they are not to replace regular inputs (NATO, 2013b, p. 44).

To conclude so far, COEs have been established to provide tangible improvements to NATO capabilities and interoperability while being of value for one or more nations at the same time. A Programme of Work determines the tasks and activities for a COE for one year. The Transformation Network Branch at HQ SACT is responsible for the overall coordination of COEs and their POW.

## **2.2 NATO Forces 2020 - From Smart Defence to its Initiative**

Since 2008 the finance crisis has forced many European governments to apply even more restrictions on their defence budgets which are already under stress, at least since the end of the Cold War<sup>36</sup> (Rasmussen, 2011a). Experts have expressed their view that more reductions through 2015 and even beyond are highly probable (C. Barry & Binnendijk, 2012, p. 3; Möckli, 2012, p. 1). Some prominent forerunners of these cuts are for instance UK’s decision in 2010 to shut down its entire carrier programme for at least 10 years or the Netherlands complete waiver of main battle tanks. However, as Binnendijk points out, these gaps do not alert NATO strategic commanders – they are more worried about existing or anticipated shortfalls regarding enabling capabilities as they were defined under the Lisbon Critical Capabilities Catalogue (LCCC) in 2010.

Even the United States are not spared from reducing their defence budget. Shortly before leaving office the former US Minister of Defence Robert Gates warned at a NATO Defence Ministers

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<sup>34</sup> basically a formal letter which is signed by ACT DCOS and submitted to the respective COE

<sup>35</sup> Requests on an ad-hoc basis are termed both as *Out Of Cycle Request for Support (OOCRFS)* and *Emergent Requests of Support (ERFS)*

<sup>36</sup> Defence spending by European NATO countries has fallen by almost 20% as well as their defence expenditures of NATO’s total has fallen by 13% down to 21%

Meeting in June 2011 that the US are questioning whether they are willing to continue to pay the approximately 75% share in NATO defence spending and that NATO risks “collective military irrelevance unless [the European Allies] bear more of the burden and boost military spending” (Alexander & Brunnstrom, 2011). Four month later, his successor Leon Panetta declared that the US will have to save more than 500bn US Dollars over the next 10 years (Cassata, 2011).

The question “How to build security in an age of austerity?” was already in the focus at the 47<sup>th</sup> Munich Security Conference in February 2011 where NATO Secretary General Anders Fogh Rasmussen held the keynote speech and unveiled a concept which he coined *Smart Defence*. This new concept calls for “ensuring greater security, for less money, by working together with more flexibility” (Rasmussen, 2011b). Although the concept’s name came into prominence by that time, Rasmussen already held a speech at the Belgian Royal High Institute for Defence in April 2010, where he highlighted almost the same topics (Rasmussen, 2010).

From an economic point of view *Greater security for less money* is nothing more than raising the efficiency of defence spending, whereas *Working together with more flexibility* addresses the way how this may be achieved. Consequently, Smart Defence was intended to focus primarily on the *hardware* – i.e. on military capabilities – with the aim to enhance efficiency regarding their use and procurement. As the Chicago Summit Declaration on Defence Capabilities (NATO, 2012b) points out “[NATO] must find new ways to cooperate more closely to acquire and maintain key capabilities, prioritise on what we need most and consult to changes to our defence plans”. Thus Smart Defence is all about three core pillars: Cooperation, prioritisation, and specialisation.

**Multinational cooperation** is seeking to better coordinate efforts among NATO members in order to avoid unnecessary duplication - such as the coordination of projects already under progress within the European Union’s Pooling and Sharing Initiative. Moreover, multinational cooperation is supposed to grant Allies, especially smaller ones, access to capabilities they otherwise could not afford individually (Rasmussen, 2012b) as well as to achieve economies of scale. In order to facilitate multinational cooperation top-down identification of capability target is coupled with bottom-up opportunities for cooperation (the two souls of Smart Defence) (Rowland, 2012).

Setting the right **priorities** in respect of defence investments is meant to focus on *What to keep* rather than on *What to cut* as well as on *What we need* before spending money on *What would be nice to have* (Rasmussen, 2012b). Finally it is a recall to remind the Allies to remain obliged to

the Critical Capabilities Commitment as a result of the new Strategic Concept, agreed upon in Lisbon 2010 (C. Barry & Binnendijk, 2012, p. 6).

**Specialisation** grapples with the challenges of uncoordinated unilateral decisions to abandon certain military capabilities. The goal is to encourage Allies to concentrate on their respective national strengths (specialization *by design*) and not to be obliged to maintain capabilities that were already dropped by others (specialization *by default*).

The role Rasmussen casts on NATO is not to lead but to serve as a facilitator for nations to lead. Thus, Smart Defence will not impose things on nations, but rather “set the strategic direction, identify possible areas of cooperation, act as a clearing house, and share best practices” (Rasmussen, 2011b).

In order to identify possible areas of cooperation, ACT was instructed in March 2011 to lead a Multinational Approach Task Force, charged with the promotion and synchronization of ideas for multinational cooperation in capability development. Moreover, the task force was expected to make specific recommendations for multinational pragmatic initiatives that were already agreed upon with nations and then discussed at the NATO Defence Ministers meeting in October 2011 (NATO, 2011d). In the run-up to the Chicago Summit in May 2012 these initiatives were divided into three categories: The first category is most developed and contains projects (tier 1) that already have an agreed scope, a lead nation and partners, and are EU-coordinated. Category two contains proposals (tier 2) that have an ambitious scope and gained interest but yet no lead but which are already EU-discussed. The third category is the idea (tier 3) level where good ideas arise that may pose an option for the future.

During a panel debate at the 49<sup>th</sup> Munich Security Conference in February 2013, SACT General Palomeros (2013) pointed out that there are currently 25 to 30 projects “ready to take off” and it is now in the nation’s responsibility, addressing first and foremost the lead nations, to “release the brakes”. However, Barry & Binnendijk (2012, p.6) made the point that “most projects are modest and limited to support areas” and “will have limited impact unless Smart Defence can truly become a new mindset toward greater multinational cooperation”. Others like Möckli (2012, p.2) claim that simply pragmatism is a key strength of those initiatives precisely because “the vast majority [is] not geared towards building up institutionally managed capabilities”.

Ultimately, General Palomeros stressed that the core of Smart Defence is not only to address capability shortfalls but in the same way, to take care about an often forgotten aspect which is the sustainment of capabilities on the long run (Palomeros, 2013).

### 2.3 Multinational integration within the NATO Force Structure (NFS)

After the Cold War was officially declared over at the NATO London Summit in July 1990, the importance of multinational military integration has increased significantly (Bredow, 2008, p. 264). By that time, many European countries were busy to cash in the peace dividend by shrinking their defence budgets and downsizing their Armed Forces while simultaneously reconsidering the general necessity to keep their national corps forward deployed in Germany. Despite of the “competitive disarmament” (Young, 1997, p. 7), NATO defence ministers decided to protect the force structure by refraining from Cold War established national corps formations and, instead, integrate appropriate national units into bi- and multinational corps and divisions (Young, 1997, p. 7). Hence, in April 1991 the Military Committee endorsed a document<sup>37</sup> which entailed a three-tiered force structure and subdivided NATO forces into three new categories: (immediate and rapid) reaction forces<sup>38</sup>; main defence forces; and augmentation forces. Most crucial, however, was “the bold decision” as General Klaus Naumann<sup>39</sup> distinctly remembered, “to transition from national to bi-national/multi-national corps within NATO” (Young, 1997, p. vii) – with the result to also include multinational corps in building up NATO’s main defence forces (Deni, 2007, p. 34). As Biehl (1998, p. 18) notes, the multinational integration of the German Army Corps by that time represented first and foremost the fact that the Bundeswehr has been a *Bündnisarmee*<sup>40</sup> where the corps were the agents for multinationality.

#### *Categories of Military Multinationality*

The concept of multinationality has always been used to describe all kinds of multinational cooperation between armed forces and has therefore been left as somehow diffuse (Gareis, 2006, p. 362). Gareis differentiates between two basic forms of collaborations which he terms *horizontal cooperation* and *vertical integration*. Horizontal cooperation is the more traditional kind of collaboration where military contingents are loosely placed abreast. It affects primarily the strategic and operational level and represents a concept which generally doesn’t affect state sovereignty. Vertical integration, by contrast, is meant for a durable und coordinated kind of collaboration on almost all levels of command, where military contingents are broken up and

<sup>37</sup> Military Committee MC 317 “Alliance Force Structure”

<sup>38</sup> Allied Command Europe (ACE) Mobile Force (Land), ACE Mobile Force (Air), Standing Naval Forces Atlantic (STANAVFORLAND), Standing Naval Forces Minesweepers (STANAVFORMIN), and Standing Naval Forces Mediterranean (STANAVFORMED). (Jones, 1999:11)

<sup>39</sup> Chief of Federal Armed Forces Staff (1991-1996); Chairman of the North Atlantic Military Committee (1996-1999)

<sup>40</sup> Literally translated *Bündnisarmee* means “Alliance-Force”. However, the intention is to point out that a *Bündnisarmee* can only be applied within a military alliance.

mixed together. However, Gareis also notes that the latter simultaneously creates complex challenges for both the soldiers and the participating nations. Different languages and cultures as well as different political and legal parameters<sup>41</sup> may hamper the daily work and call for patience, time and attention. As a general rule, Gareis points out that the more homogeneous the military structure, the lower are organisational efforts and costs. He finally concludes that *integrated military multinationality* is a difficult organisational structure, highly prone to conflict and partially born out of necessity of nations to work together in order to afford capabilities that otherwise would not be achievable; an aspect that partially also applies for COEs.

Military policy distinguishes between three organisational concepts for multinationality .

***The lead-nation concept*** is based on the idea that nations provide military units (at brigade level or above) which are led by a headquarters of one state in case of an operation. However, the units assigned from other states act according to their own national idiosyncrasies such as command principles and procedures as well as strategic and operational objectives. Permanently assigned liaison elements on both sides serve as an interface to enable interaction. Thus, genuine multinational collaboration will only happen in cases of real operations. Both the II (GE/US) Corps<sup>42</sup> and the V (US/GE) Corps<sup>43</sup> were formerly organized in accordance to this kind of concept which is in accordance with horizontal cooperation.

***The framework concept*** is based on the idea that a framework nation is responsible for providing administration, command and control (C2), and logistic support (including infrastructure) of a HQ and fills the majority of posts inside it. A good example is the Allied Rapid Reaction Corps (HQ ARRC) which is structured along this concept. While United Kingdom provides approximately 80% of funding and 60% of the overall HQ staff (442 posts), 15 Partner Nations<sup>44</sup> are contributing the remaining complement of personnel. Although HQ ARRC has no forces to command immediately, military units from 6 NATO members such as the first German Panzerdivision<sup>45</sup> are affiliated. However, as the dominance of the framework nation can't be denied, this concept is something in between horizontal cooperation and vertical integration.

***The integration concept*** is based on the idea to organize a HQ in a really integrated fashion by conceding the participating nations the same rights and duties in every respect. This is first and foremost expressed by the proportionately distribution of posts according to the contribution of

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<sup>41</sup> This aspect applies also to COEs in respect to MOU negotiations

<sup>42</sup> The Corps was established in 1993 and dissolved in 2005 as it was used to build up the Response Force Operations Command (Kommando Operative Eingreifkräfte).

<sup>43</sup> Germany joined the V. Corps in 1993 and left in 2005.

<sup>44</sup> with Germany as second largest contributor providing nearly 8%

<sup>45</sup> 1<sup>st</sup> German Tank Division

each country and by allocating top positions on a rotation basis. This concept represents the idea of pure vertical integration. The I GE/NL Corps, the GE/FR Brigade, the Eurocorps, and the German-Polish-Danish Multinational Corps Northeast are examples of such integrated forces. As Gareis points out, it is most likely that both NATO and EU will utilize this concept to shape their future model of multinationality.

Most Centres of Excellence apply the framework concept, although two COEs – the CIMIC COE and the NMW COE – have more than just one framework nation. For example, the CIMIC COE is located in Enschede with the Netherlands (35% posts) and Germany (51% posts) as Framework Nation as well as five Sponsoring Nations. The top position of the director and the assistant director changes between both FNs on a rotation basis of normally three years. Thus, the CIMIC COE can be viewed as being between the framework and the integration concept.

### *Evolution of the NRDC*

NATO had to adapt to new tasks as outlined in its Strategic Concept, released in November 1991 (SC91), and to prepare itself for enlargement (Biehl, 1998, p. 16). Hence, the allied Chiefs of Defence (CHODs) launched an initiative<sup>46</sup> in September 1994 in order to examine the Alliance's Integrated Military Structure and to initiate its internal adaptation. The first stage was to review guidance for the implementation of the new strategic concept. The second stage was to reform the integrated command structure which was finally implemented in September 1999 (Young, 2000, p. 45). The final stage then was the NATO Force Structure Review (NFSR), initiated at the outset of 2000 after NATO's strategic concept was updated in April 1999 (Wright, 2002, p. 1). As a consequence the old three-tiered force structure, adopted in 1991 was abandoned and replaced by a structure of forces with a graduated readiness level – so-called NATO Rapid Deployment Corps (NRDCs) – consisting of High Readiness Forces (HRF) and Forces of Lower Readiness (FLR).

Surprisingly, as Deni (2007, p. 49) notes, several alliance members were keen on nominating themselves as candidates of the highest readiness level. This was strange due to at least two resulting disincentives that this would bring along. First, as HRF(L) are not only HQs elements they also require on a fulltime basis the complete range of military forces with deployable combat support and combat service support elements which, in turn, calls for substantial initial investments. Secondly, HRF(L) have a notice to move of 90 days which calls for even more expenditures to maintain a permanently high readiness status (Deni, 2007, p. 50). By contrast,

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<sup>46</sup> the Long-Term Study (L-TS)

Deni quotes an observer<sup>47</sup> who remarked that “member states were beating down the door to get the HRF(L) designation”. According to several other interviews which Deni conducted with NATO assigned military officers<sup>48</sup> during 2003, there are at least four significant reasons that may explain such a behavior. First, although hosting a HRF(L) generates costs, host nations will receive NATO exercise funding and get access to NATO’s training and evaluation infrastructure. Second, it was suggested that host nations are likely to link political prestige and credibility to having NATO infrastructure on its own ground, which in turn is funded by NATO. This was even more essential in times when the NCS was simultaneously under pressure. A third motive was a certain kind of internal pressure, arising from its own military organizations that were seeking to justify their own national force structure. Hence the initiators derive primarily from the military organization itself and utilized NATO-generated requirements as a sort of justifier to demonstrate the unchanged importance of their own military branches in times of declining defence budgets and downsized armed forces. Finally, Deni presents a cause which is closely linked to the negative connotation of the label FLR. The wording *Lower Readiness* was perceived not as ‘sexy’ as *High Readiness* which was assessed by European allies as “being in the major leagues through having an HRF(L), rather than being relegated to the minor leagues of the FLR” (Deni, 2007, pp. 50-51).

At the end six NRDCs were nominated by European Allies. Germany contributed together with the Netherlands the I. G/NL Corps based in Münster (GER). Moreover, Germany was also involved in the Eurocorps, based in Strasbourg (FRA) and in the ARCC, based in Rheindalen (GER).

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<sup>47</sup> US government official involved in policy planning, interviewed by Deni (2007) on 25. January 2003

<sup>48</sup> Military officers from France, Germany, Great Britain, Netherlands, and Poland

### 3. The Conceptual Framework

A NATO accredited Centre of Excellence is an International Military Organisation (IMO). A very short comprehension of the term *organization* refers to “a social unit with some particular purposes” (Shafritz & Ott, 2001, p. 1). However, some serious questions arise from that definition such as how to deal with a social *unit* that obviously has no single identity, or how to get information about the *unit* and its *purposes*.

This chapter will discuss these questions as follows. The first part offers a brief overview over organizational theory with a focus on the ecological level of analysis within natural-system perspective. This means that an organization such as a Centre of Excellence is primarily viewed as a natural collective of individuals within a cluster of other interdependent entities. As organizations are dependent on all kind of resources, they form part of an open environment in which they seek to survive. Following Scott and Davis the organization as a collective consists of participants who “are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource” (Scott & Davis, 2007, p. 30). However, since the study is concerned with German hosted COEs and not with the dynamics and relationships inside a single COE, the conceptual framework is primarily based on the ecological level of analysis.

Part two covers the organizational model that I have chosen to guide my further research. Many scholars (Preisendörfer, 2011, p. 18) claim that at least some basic characteristics pertain to all kind of organizations; for example a distinctive structure, both formal and informal; or certain kinds of task, or organizational goals and strategies . These characteristics are hence reflected in various organization models. One of these models is the *Congruence Model of Organizations* (Nadler & Tushman, 1982) which I have adopted with some modifications as analytical framework to focus on Centres of Excellence.

#### 3.1 Organizational Theory<sup>49</sup>

According to Shafritz, Ott and Jang “[t]here is no such thing as the theory of organizations” (2011, p. 1). Rather, theories can be assigned to different schools of thought<sup>50</sup> with each major school having its own view on organizations, its own concepts and its own assumptions; and

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<sup>49</sup> Hall & Tolbert (2005, pp. 207-208) point out that different school of thought can be named as theories, models, or perspectives, depending on the analyst. I will subsequently refer to the term “theory”.

<sup>50</sup> There are other expressions than schools for compatible theories and theorists such as perspectives, traditions, frameworks, models, paradigms or just organizational theory (Shafritz et al., 2011, p. 1).

with each school defending their own position while at the same time holding deficiencies against the others (Shafritz et al., 2011, p. 1). Consequently the perspective that is applied on organizations has important consequences for the way theorists think about them. While something may be perceived as essential from one perspective, it may almost be irrelevant from another one. For instance, Gareth Morgan describes eight different images of an organization such as a machine that seeks to accomplish goals; as an organism that strives to make its way through a resource environment; or as a small society with its own structure and culture (Rittberger, Zangl, & Kruck, 2013, p. 20). Thus, each perspective shapes a certain kind of images and highlights different aspects of organizations. But how should the image of a COE look like? Following Morgan the image of the organization as an organism with its focus on resources may be quite appropriate for a Centre of Excellence. COEs are heavily dependent on resources in terms of financial and personnel contributions from their Sponsoring Nations. On the other hand, COEs may also be regarded as small societies, consisting of groups or individuals, organized in a distinctive structure.

The Natural System Perspective views organizations first and foremost as organic collectivities in the sense of social groups (Scott & Davis, 2007, p. 59). Theorists within this perspective are more occupied with behavior and action and less with the formalities and decision-making. They ask in the first place: “What is done?” rather than “What is decided or planned?” (Scott & Davis, 2007, p. 62). Thus, goals are related to the behavior of participants inside that group (i.e. organization). This, however, often results in a disparity of officially announced goals on the one hand (i.e. normative goals) and real goals on the other hand (i.e. descriptive goals). However, even if normative and descriptive goals are congruent, organization always have to fulfill “support or maintenance goals” (Scott & Davis, 2007, p. 60) in order to survive. “Because [the survival of the organization] is a source of power, or resources, or prestige, or pleasure [some participants] wish to see it preserved and include among their own goals that the organization itself be protected and, if possible, strengthened” (Scott & Davis, 2007, p. 61). Consequently, the organization (i.e. its survival) becomes an end in itself. This correlates quite well with Denis’s finding about the establishment of the NRDCs as explained in chapter two.

Referring to Morgan’s image of an organization as a small society there is, however, a pending problem for an analysis. Shall we focus on the level of individuals inside an organization or shall we apply a broader and less bounded perspective on organizations by stressing the importance of structural features inside organizations or even among them? In case of a Centre of Excellence, for instance, we could focus solely on the Subject Matter Experts (SMEs); or the branch which

they are part of; or even focus on the COE as such. The latter would call for a transition from a social psychological level<sup>51</sup>, over to a structural level<sup>52</sup> and finally set the focus on an ecological level of analysis. Although Scott (Scott, 1998, p. 16) admits “distinguishing [...] is somewhat arbitrary and ambiguous”, I will subsequently apply to the latter level as this study is not supposed to focus on individual or group behavior inside an organization but rather includes its whole environment.

The Ecological Level looks on an organization as a coherent entity, acting as a collaborative object in a larger system of relations. The focus is on the relationship between one or more organizations and their environment as well as on the relations among a number of organizations in their environment. For instance, we could focus on some COEs individually or even treat them as a cluster of COE such as *German hosted COEs* or *Maritime heavy COEs* or *tactical orientated COEs*. The ecological level can further be divided into three different approaches (i.e. concepts) according to the way the organization’s environment is perceived. The one I will apply is the concept of *operational-set*. Within this concept an organization serves as the focal point that has a relationship with its customers (Scott & Davis, 2007, p. 116). For instance, a COE could be the focal organization dealing with other entities inside its Community of Interest such as a Joint Force Command (JFC). Relations between the JFC and other entities within the COI are of no interest as long as they do not affect the activities or interest of the respective COE. This means that a given organization has to be viewed in a way that is predetermined by the relation with its specific partners. A Resource Dependence Theory applies the concept of operational concepts and assumes that an organization influences its environment and not the other way round.

So far I have described the natural system view that views organizations as organic collectivities in the sense of social groups. Moreover I have explained the ecologic level of analysis which views organizations as coherent entities, acting collaboratively in a larger system of relations. I will now turn focus to my analytical model.

### **3.2 Analytical model**

This section is based on the *Congruence Model for Organization Analysis* which has been created by David Nadler and Michael Tushman in the late 1970s. As point of departure Figure 1 illustrates their model, including some modifications I have made to guide my further research.

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<sup>51</sup> The focus is on individuals and their behavior or interpersonal relations inside an organization where the characteristics of an organization constitute the context that has a certain impact on the individuals.

<sup>52</sup> This level is concerned with organizational structures and focuses on subunits or analytical components within the organization.

First I describe the model in general before I continue to elaborate on its basic components, which modification I have applied, and how the components are related.

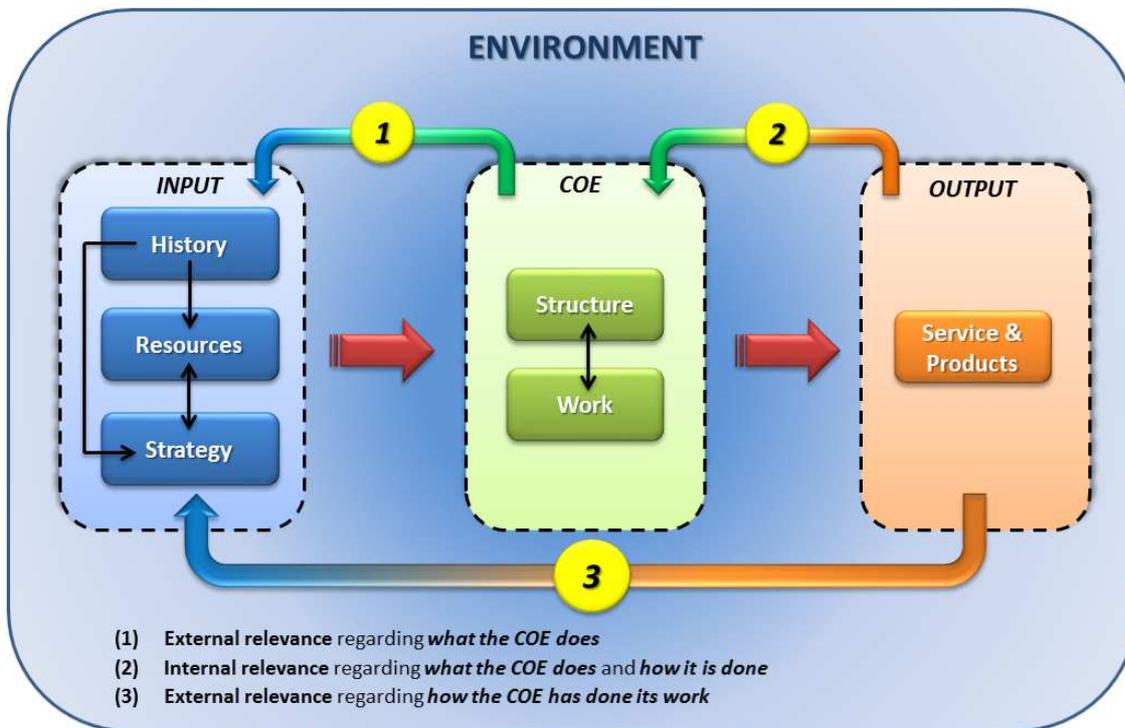


Figure 1: Conceptual Framework; adapted from the Congruence Model for Organization Analysis (Nadler & Tushman, 1982)

Nadler and Tushman were driven by their aim to create a general model of organizations that allows thinking about an organization “as a total system” (Nadler & Tushman, 1982, p. 36). They recognized that social phenomena show many characteristics also inherent in natural or mechanical systems and that organization, therefore, may be understood much better “if they are considered as dynamic and open social systems” (Nadler & Tushman, 1982, p. 36). That is, organizations are not cut-off from their environments but rather form a dynamic and interdependent relationship. This means that inputs are transformed to outputs which are again connected by a feedback loop with renewed inputs. These feedback loops contain information about the organizational output and can therefore be used to control, correct, or even change organizations.

With a view to the model's name, Nadler and Tushman define congruence as “a measure of how well pairs of components<sup>53</sup> fit together” regarding their mutual “needs, demands, goals, objectives, and/or structures” (Nadler & Tushman, 1982, p. 42). The model deals in the first instance with components located within an organization – such as tasks or structure. Because these components are interrelated<sup>54</sup> a change in one element simultaneously affects changes in other elements. Consequently, the model sets focus on effectiveness, “based on the quality of these ‘fits’ or congruence” (Nadler & Tushman, 1982, p. 38). This means that organizations are viewed as most effective as they succeed in matching their components. Furthermore, by taking strategy into account this view extends to also include the fit with its larger environment; this means, with reference to the level of analysis, to include the ecological level. Thus their hypothesis reads as follows: “[A]n organization is most effective when its strategy is consistent with its environment (in light of organizational resources and history) and when the organizational components are congruent with the tasks necessary to implement strategy” (Nadler & Tushman, 1982, p. 43). Although this sounds more than logical, the relevance of Centres of Excellence would not have been contested if the hypothesis had been wrong. This can be illustrated by a simple example: Since 2010 both the JAPCC and the MILENG COE have been realigning their respective strategies in order to maintain or regain relevance.

### 3.2.1 Basic Components

Many scholars (Preisendörfer, 2011, p. 18) claim that at least some basic characteristics pertain to all kind of organizations, leading to their inclusion in various organization models. Subsequently I describe these components which are arranged in three clusters as depicted in Figure 1: input, organization (i.e. the COE), and output. However, as the component *environment* surrounds the three clusters, I will start with it.

#### *The Environment*

Organizations are not isolated from their physical, technological, cultural, and social environment. Rather organizations strive to achieve their ends and seek to survive in their environment while they are interacting with this larger system of which they simultaneously are part of (Scott & Davis, 2007, p. 19). Both the organization and the environment are living in some kind of symbiosis. While the environment views organizations first and foremost as producers of products and/or services in accordance with environmental demands, the

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<sup>53</sup> While Nadler & Tushman refer to the term *components* from an organizational view, they use the term *elements* when they apply a systems view. Subsequently I will only refer to the term components.

<sup>54</sup> as indicated by the black arrows inside the blue and green box

organization views its environment primarily as provider for resources which are necessary to produce output. As the environment absorbs that output – as its own input resource – it simultaneously supplies the means for the organization to acquire more inputs, and so on (Hatch & Cunliffe, 2013, p. 58).

As Hatch and Cunliffe (2013, p. 57) notice, in modern organization theories the environment is viewed as an “objective entity lying outside an organization’s boundary”. And also Nadler and Tushman (1982, p. 38) consider the environment as those factors that have a potential impact on the organizations, including among others, markets (i.e. clients and customers), suppliers, special interest groups, and also competitors. Moreover they identify three critical features that affect and organization’s ability to survive and pursue its objectives: First, the environment puts demands on the organization; second, it places constraints on organizational action; and finally the environment offers opportunities to be explored by the organization (Nadler & Tushman, 1982, p. 38).

But Hatch and Cunliffe (2013, p. 57) also admit that it is often difficult to define the boundaries between the organization and its environment because this demarcation contains a decision about what to include and what to leave out<sup>55</sup>. To illustrate the problem I will take the Sponsoring Nations as an example. On the one hand, SNs are customers of a COE and thereby part of the environment because they make use of a Centres’ products and services. On the other hand, Sponsoring Nations are represented in the Steering Committee which is neither part of the environment nor a completely inherent part of the COE. This indicates that the environment “shapes, supports, and [even] infiltrates organizations” (Scott & Davis, 2007, p. 31).

Consequently, I do not treat the *environment* as a *solely* input element<sup>56</sup> (as opposed to Nadler and Tushman) but as an all-encompassing entity<sup>57</sup>. In order to illustrate the environment in the context of COEs, Figure 2 depicts the specific environment for the Civil-Military Cooperation Centre of Excellence (CCOE).

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<sup>55</sup> For instance, they prompt the question whether students are part of a university or rather are its customers - whether students are “raw material” or rather output.

<sup>56</sup> blue field to the left

<sup>57</sup> that’s why each of the three boxes is surrounded by a dotted line, indicating the close relationship with the environment

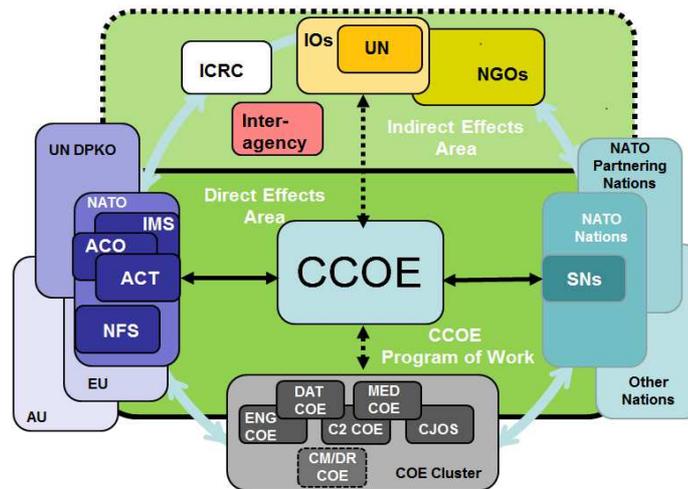


Figure 2: CCOE and its environment (CCOE, 2012)

The horizontal line represents the customer level (i.a. NATO bodies to the left and Nations to the right) whereas the vertical line indicates the level of coordination and cooperation (i.e. other COEs at the bottom and other organizations such as the UN at the top).

For the purpose of this study, the environment is viewed as a separate but not separated all-encompassing entity – as indicated in Figure 1 by the dotted lines around the boxes – and defined as a space in which significant elements outside a COE influence a COE’s ability to survive and achieve its objectives by either imposing demands and constraints or by offering opportunities.

### Input Components – History, Resources, and Strategy

As depicted in Figure 1, the following components are partly interrelated. For instance, strategy cannot be developed without taking care about resources and history. By contrast, history cannot be influenced as long as we do not have the opportunity to go back in time. ☺

#### *History*

Some call it the “shadow of the past” (Larsson, Bengtsson, Henriksson, & Sparks, 1998, p. 301), others say “History matters!” (Schreyögg, Sydow, & Holtmann, 2011, p. 81). According to Schreyögg et al. (2011, p. 82) this simple statement is broadly accepted in scholarship and frequently subsumed under the prominent but at the same time often vague and ambiguous construed label of *path dependency*. My intent is not to equate history in the context of this study with path dependency. Regarding the latter, Schreyögg et al. further point out, that today’s questions are concerned with ‘how’ respectively ‘how far’ organizations are influenced by their history. This coincides with Nadler and Tushman (Nadler & Tushman, 1982, p. 39) who state

that major stages that are reflecting an organization's development over a certain period of time are essential to understand their contemporary behaviour. Additionally, contemporary behaviour is also influenced by the current impact of past events such as strategic decisions, the nature and management of past crises, or the evolution of organizational core values and norms. As a matter of fact, however, Centres of Excellence do not have a distinctive 'shadow of the past' – meaning, their history is yet quite short. Therefore it is important to consider also their antecedents, if applicable.

In the context of this study, history is therefore viewed as the pattern of past behaviour, activity, and effectiveness of a COE that affects the contemporary operation and orientation of a COE.

### ***Resources***

The term *resource* does not exclusively refer to material resources. It can be rather viewed more broadly to reflect almost everything organizations require and that cannot be produced by themselves such as raw materials, capital, labor, infrastructure, equipment, services or technical innovations (Hall & Tolbert, 2005, p. 212).

In terms of the establishment of a Centre of Excellence the Host Nation is expected to take the initial costs of which the funding of a building with respective infrastructure normally requires most of the resources. However, initial costs are considerable and their appraisal has to be made thoroughly. As the director of the Military Engineering COE puts it:

How much can we afford? I think this is often underestimated by some Host Nations. For instance, when we talk about having some more COEs today – each Host Nation must be aware: This requires resource allotment. (Interview Radlmeier).

And as the establishment of previous COEs reveals, costs have ranged from several hundred thousand Euros to over €12 million Euros (Wedge, 2012, p. 8). Moreover, each Sponsoring Nation has make contributions to the COE's annual budget in accordance with the number of Staff officer posts they have applied for. Currently these costs amount between €6.000 and €27.000 per officer and year (NATO, 2013b). However, it must also be noticed that these costs regularly constitute just a small part of what a single staff officer costs when filling a post abroad. For instance, according to Hilde the total average costs to keep an officer in the NATO Command Structure is about €180.000 per annum for a Norwegian officer, €95.000 for an officer from the Netherlands and an officer from Romania costs about €74.000 (Hilde, 2011a, p. 10). Moreover, if these personnel bring along their families, costs may go up even more.

However, less tangible assets such as the legitimacy of an organization, or its generally perception and reputation in the market may be similar or even more important – a fact that is particularly evident for nonprofit organizations<sup>58</sup> (Anheier, 2005, p. 189). Against this backdrop *being relevant* might be even considered as a critical resource because a Centre that is considered relevant will most likely not be questioned by its sponsors but rather attract new sponsors and thereby gain additional tangible resources. The concept of *critical resources* is covered by the Resource Dependence Theory. Within this theory it is a fundamental assumption that an organization's dependence on critical resources from its environment influences both its decision-making process and activities. Resources are viewed as critical in so far as an organization is unable to operate either without *input* resources or without a customer for *output* resources (i.e. products and services) (Pfeffer & Salancik, 2003, p. 46). Moreover, the importance of some resources as well as the extent to which their suppliers can be replaced has to be taken into account additionally. This means that arising problems may turn out to be rather the consequence of an unreliable environment than a result of the organization's dependency on that environment (Pfeffer & Salancik, 2003, pp. 2-3). For instance, the functions of the JAPCC's predecessor organization, the Reaction Force Air Staff (RFAS), were considered to be "no longer relevant in the newly transforming NATO structure" (JAPCC, 2011a, p. 2). Therefore, the RFAS was dissolved in 2004 and succeeded by the JAPCC. This demonstrates that an intangible resource such as relevance was even more essential than tangible resources such as financial contributions or personnel.

Subsequently resources are viewed as those tangible and intangible assets which can hardly be substituted and which are necessary to meet external demands and further a COE's mandate.

### ***Strategy***

Strategy can be defined in many different ways. According to Strachan (2011, p. 1) *strategy* is a forward-looking declaration of intent and describes the potential required means to fulfill that intent. Others such as Volberda and Elfring (2001, p. 44) describe strategy as "an adaptive process where piecemeal strategic decisions are taken based on continuous feedback between formulation and implementation in an emergent pattern over time". Put simply, strategy is a recurring and adaptive process that outlines how an organization intends to achieve its goals. Referring to the concept of organizational goals, Scott (1998, p. 286) notice that "[it] is among the most slippery and treacherous of all those employed by organizational analysts". On the one

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<sup>58</sup> COEs can be considered to be a non-profit organization (NPO)

hand organizations are often viewed as rational instruments to achieve goals (Pfeffer & Salancik, 2003, p. 23) which is why some analysts claim that goals are the only way to understand an organization (Scott, 1998, p. 20). On the other hand the importance of goals as a characteristic element has often been criticized (Pfeffer & Salancik, 2003, p. 23). Because goals are frequently just vague formulated, it is often called into question how far they have a function that goes beyond simply justifying past actions (Scott, 1998, p.20). Preisendörfer (2011, p. 64) even notes that goals are at the end often nothing more than a mere metaphor. Finally, as Scott and Davis (2007, p. 185) point out goals are not unimportant but goals “have been subsumed under somewhat more general concepts, in particular strategies<sup>59</sup>”.

The German hosted COEs do neither have specific stated goals in their originally<sup>60</sup> MOUs or concepts nor do these documents explicitly outline a specific strategy. But they can still be used to derive and reveal a distinctive strategy.

The original Operational MOUs cover under the heading *Mission and Responsibilities* more or less generic descriptions of their missions similar to “The [...] COE’s mission is to [...] in order to support NATO transformation [...]”, supplemented by some more specific tasks or responsibilities. In general, NATO’s definition of the term *Mission* reads “a clear, concise statement of the task of the command and its purpose” (NATO, 2012a). Nadler and Tushman (1982, p. 39) call this the *core mission* or *basic purpose*. Put simply, the mission seeks to answer the questions as to why the Centre exists at all.

Moreover, some COE Directors define their own *Vision* that outlines a desired end state which they aspire to achieve in the long-term future. Thus, a vision may help to further define a strategy. On the other side, the more strategy is directed towards the long-term future the less it is capable of defining what it exactly seeks to achieve (Strachan, 2011, p. 1). Additionally, the more nations participate in a multinational endeavor the more difficult it is to find common ground on defining mandatory objectives within a broader strategy (Gareis, 2012, p. 348; Gareis & Klein, 2006, p. 365). This in turn leads to ill-defined goals and tasks which, however, allow for maintaining flexibility, based on the lowest common denominator.

Thus, the conception of strategy is no less controversial than the one of goals. Strachan (2005, p. 33) points out that “[t]he word ‘strategy’ has acquired a universality which has robbed it of meaning, and left it only with banalities”. However, obviously some basics have remained as they are covered in NATO’s Allied Joint Publication, AJP-01(D), the capstone doctrine for

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<sup>59</sup> *strategies*, in connections with firms; or *policies*, referring to public agencies

<sup>60</sup> Currently the MOUs of the JAPCC and the MILENG COE are under revision.

Allied Joint operations: “A winning military strategy hinges on the successful union of Ends (objectives), Ways (broad approaches) and Means (resources)” (NATO, 2010, No. 0407). Consequently, these basics are also found in the language of organizational theories. Scott and Davis (2007, p. 36) define goals as “conceptions of desired ends” which, provided that they are specific enough, deliver clear criteria for choosing between alternatives about the organizational scope and domain. Besides goals, Scott and Davis (2007, p. 21) also include specific tactics that have to be employed in order to pursue the strategy. Although denoting the same subject, Nadler and Tushman (1982, p. 40) refer to “specific supporting strategies” instead of using the term tactics. In its broadest context, they define strategy as “the stream of decisions about how organizational resources will be configured to meet the demands, constraints, and opportunities within the context of the organization’s history” (Nadler & Tushman, 1982, p. 39). Finally, the Resource Dependence Theory accentuates that fact that organizations actively choose those strategies that help to strengthen their autonomy and pursue their own interests (Scott & Davis, 2007, p. 233). This means that organizations “scan the relevant environment, searching for opportunities and threats, attempting to strike favorable bargains and to avoid costly engagements” (Scott, 1998, p. 116).

Accordingly, for the purpose of this study, strategy is defined as a recurring and adaptive process of making decisions by the COE about Ends (objectives) and Ways (broad tactics) not only to match Means (resources) with demands and constraints but also to actively explore the opportunities provided by the environment.

## **Organizational Components – Structure and Work**

### ***Structure***

Generally the social structure of any human organization can be differentiated by two distinctive components: a normative and a behavioural part (Scott, 1998, p. 17). However, both components are not mutually exclusive but rather interrelated to a varying extent (Scott, 1998, p. 18).

The normative structure describes how things should be. Its prescriptive character is based on values, norms, and rules that in turn constitute a relatively coherent and consistent set of beliefs and prescriptions (Scott, 1998, p. 17). Therefore, the normative structure is also referred to as the formal structure (Preisendörfer, 2011, p. 66). Formalization within an organization is not only expressed by the extent to which rules are precisely and explicitly formulated such as by Rules of Conduct (ROC) or Terms of Reference (TOR), but also by the extent to which roles and their

relations are prescribed and separated from individuals and their attributes who are occupying positions in the structure (Scott, 1998, p. 25).

The social structure of a Centre of Excellence is quite formal – something that is surely not uncommon for military organizations. Its normative character is expressed in its concept, in two MOUs and in supplementing official documents such as job descriptions and Standard Operating Procedures (SOPs). The normative structure is essential both for running and studying organizations because it includes central design and action parameters (Preisendörfer, 2011, p. 19). It imposes, however, also constraints on its counterpart, the behavioural structure that comprises activities, interactions, and sentiments among its members (Scott, 1998, p. 18). This rather informal structure describes how things really are because it accepts that its members carry their own ideas and agendas and bring along their own distinct values, interests and sentiments. It is often claimed the people are the key factor for organizational success (Miebach, 2012, p. 17). This success is dependent on their willingness and ability to make contributions to the organization by providing their individual knowledge and skills, however, basically not without getting a fair equivalent. These equivalents may consist of either general incentives or specific inducements. While the former refer to universal working conditions such as the opportunity of comradeship or the feeling of being part of something bigger, the latter frequently consist of both material assets (e.g. financial rewards) and non-material opportunities (e.g. prestige, power, or position). Together these inducements are closely related to the needs, preferences, perceptions and expectations of people (Barnard, 1938, pp. 93-97). Therefore are specific inducements of greater interest in course of the study, as they may help to understand why certain decisions were taken or even not.

Finally, as norms (i.e. the formal structure) are again influenced by the behaviour of people, this leads to “a state of dynamic tension – each existing and changing somewhat independently of the other while at the same time exerting continuing influence on the other” (Scott, 1998, p. 18). Consequently, the social structure “provides the context for action” (Scott & Davis, 2007, p. 25) in which people interact. Thus I have decided not to separate between the formal and informal structure (in opposed to Nadler and Tushman). Moreover, as the primary focus of this study is not to access a more or less hidden web of relationships among individuals inside a Centre of Excellence, I have also merged these aspects with the social structure.

Against this backdrop *structure* refers to regularized as well as to behavioural aspects of the relationship that exists among the members within a COE who are seeking to fulfill their tasks.

## ***Work***

The basic work of an organization consists of different tasks which have to be done by the application of technology in order to achieve specific goals and thereby implement particular strategies (Scott & Davis, 2007, p. 21). Nadler and Tushman (1982, p. 41) claim that an thoroughly understanding of the basic work flow is essential. They suggest some critical features for an analysis which consists of four elements: first, the necessary types of skills and knowledge required by the work; second, potential types of rewards provided by the work; third, constraints on performance demands imposed by the work (e.g. financial restraints or critical time demands); and finally, the degree of uncertainty related to the work.

Scott and Davis (2007, p. 21) assert that organizations possess technology which is applied as a “mechanism for transforming inputs into outputs”. Technology is often viewed as embedded in mechanical assets but it also comprises the knowledge and skills of people which is particularly essential for a Centres of Excellence.

Thus, work describes the various tasks that a COE has to accomplish to achieve its determined goals and is dependent on some critical features such as required skills and knowledge, potential rewards, imposed constraints, and uncertainty.

## **Output Components**

### ***Service and Products***

The output that is produced or provided by an organisation can be utilized as an indicator for its performance and effectiveness. At the ecological level Nadler and Tushman (1982, p.40) differentiate between three factors that are important regarding an organizational evaluation. First, goal attainment; second, resource utilization while attaining the goals – in terms of burning up resources or saving resources; and finally adaptability which means whether an organization has been able to gain a favourable position in relation to its environment. This means that for an organization to survive, it must adapt by changing as it realizes that environmental conditions are changing. Moreover, output that is produced below the ecological level may have an influence on it. For example, the individual training of COE personnel (i.e. SMEs) is an output that benefits in the first instance the COE. However, as soon as the SME return back home his experiences will not stay within the COE. Finally, maintaining a favorable balance between input and output are essential to its own survival (Nadler and Tushman , 1982, p.40).

Thus, output can be defined as the result of all organizational products that require resources in order to contribute to accomplishing the mission.

### 3.2.2 Linking Feedback Loops and Relevance

According to Hjørland (2010, p. 229) something is relevant to a specific task if it increases the likelihood of accomplishing the goal which is implied by the task.

As depicted in Figure 1, the model offers three feedback loops which I have labeled relevance loops. However, before I describe the three relevance loops, I have to explain how I understand relevance in this context, even if it is frequently acknowledged that the term needs no further explanation because “people understand relevance intuitively” Saracevic (1996, p. 13). As this might be true for the semantic meaning of the term, this, however, does not pertain to its context because there may be great differences regarding the matter at hand.

Yet, relevance is often linked to the field of information retrieval systems<sup>61</sup> from which I have gathered a general definition that views relevance “as a cognitive notion [that] involves an interactive, dynamic establishment of a relation by interference, with intentions toward a context” (Saracevic, 1996, p.5). This means that relevance tends to have an ordinal character<sup>62</sup> which is reflected in the mind of related people. Additionally, the definition suggests that relevance is not a static condition but rather dynamic as it frequently involves a reassessment (i.e. feedback loops) regarding the effectiveness of its relationship. Moreover, relevance is always grounded in a context – the aforementioned matter at hand – and at the same time directed toward that context. Finally intentions are at stake as the context must be linked to objectives, roles, or expectations. This indicates that “motivation is involved” (Saracevic, 1996, p.5).

Against this backdrop I subsequently explain how relevance is linked to the three depicted feedback loops. While the first and the third loop are concerned with a Centres’ *external* relevance for its environment, the second loop refers to a Centres’ *internal* relevance as expressed by a certain kind of self-reflection. This self-reflection may question whether a COE does the right things (i.e. being effective) and whether these things have been made right (i.e. being efficient). By contrast, external relevance applies a different perspective. While the first loop questions whether a COE is (still) relevant for a specific environment on the subject of its

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<sup>61</sup> for example search engines such as Google or Yahoo

<sup>62</sup> such as high, medium or low; or it is based on a scale

‘technical’ scope, the third and obviously most important loop is concerned with the questions whether the quality of the outcome is (still) relevant for a specific environment. Or to put it more bluntly: While the first loop asks: Do we (still) need this kind of subject matter expertise? – the third loop focuses on the question: Does the COE (still) provide that kind of subject matter expertise that we need? The crucial difference between both questions is their context; that is whether there is a general need of expertise or not – the latter indicated by the first question.

## **4. The Research Design**

### **4.1 Research approach**

According to Creswell (2007, p. 39; 2009, p. 3) the decision in favour of a specific research design particularly depends on the research problem, respectively the issue being studied. The research question of this study is aiming at exploring the interaction of COEs and the environment in which they strive to further their mandate in order to maintain or even regain relevance. This means to identify distinctive features, capable of exerting influence on the Centres’ relevance for their Sponsoring Nations. The process of exerting influence is determined by constraints and demands imposed by the COE’s environment as well as by potential opportunities. Following Mayntz (2003, p. 3), the explanation of a given phenomenon (i.e. the relevance of COEs) by identifying the process through which the phenomenon has been created is called *causal reconstruction*. In the course of this reconstruction a historical narrative may come up as a side effect. However, the predominant aim is to enable the provision of generalizations, which involve processes and not correlations (Mayntz, 2003, p. 3). Mayntz refers to these “causal generalizations about recurrent processes” (Mayntz, 2003, p. 5) as mechanism statements. Gläser and Laudel (2010, p. 25) argue that this causal mechanism is often neglected by scholars and that it is only accessible by qualitative methods. The search for these mechanisms relies on a thorough analysis of just a few cases and is called the “mechanism-orientated strategy” (Gläser & Laudel, 2010, p. 26). Thus, a qualitative research design is most appropriate.

However, subsequently I will justify this decision more precisely. Creswell (2009, p. 4) describes *Qualitative Research* as a way to explore and understand what individuals or groups associate with a socially or humanly related phenomenon. He further states (2009, p. 18) that this approach is useful especially when important variables cannot be identified in advance and if there has been done just little research on the topic in question. Moreover, a qualitative approach is

advantageous in those cases where existing theories may not apply to the particular group under study. He finally sets forth that qualitative research will help a researcher to gain a more detailed understanding of the phenomenon as the researcher can directly talk with participants and subsequently get a deeper comprehension of the whole context (Creswell, 2007, p. 40).

According to Wrona (2005, p. 18) a qualitative research approach is recommended in cases where the starting situation is complex. The complexity is constituted by insufficient knowledge about the phenomenon itself, about relevant variables and categories, and finally due to a lack of central hypotheses. Moreover he asserts that a qualitative research is favourable if a phenomenon should be analysed as comprehensive as possible. This is usually the case when a researcher has to deal with complex cause-effect relationships that cannot be explain by simply isolated influence parameters. Moreover, even if a researcher may identify specific relationships between some parameters, these relationships, however, often remain unclear and call for further interpretation. Finally he recommends a qualitative research approach if the researcher puts special meaning on the history and the context of an issue.

Both Creswell and Wrona point out two essential aspects that are inherent in the research question. The first aspect is the complexity of the phenomenon because Germany as well as a COE cannot be treated as an individual actor but rather as corporate actors – meaning the collective and organized acting of people. The second aspect deals with the context due to an overtly contradiction between the needs of NATO and Sponsoring Nations on the one hand and the corresponding demands put on the COEs on the other hand. The dilemma is a reciprocal situation because of the constellation of actors. While Sponsoring Nations are all part of a COE – by their participation in the Steering Committee and through their military personnel working inside a COE – they are at the same time also customers. This constitutes a bi-directional constellation of national actors; from inside out and vice versa. The question than is whether these directions are exclusive or rather complementary.

## **4.2 Case Study Strategy**

This thesis makes use of an exploratory case study which is based on a qualitative research approach. This means that the study seeks to understand what has happened within a case by looking beyond descriptive features and studying the surrounding context. According to Creswell (2007) a Case Study takes advantage of multiple sources of information, including not only interviews but also documentation. This has been realized by applying official documents such as MOUs and Assessment Reports as well as other COE related open-source documents such as PowerPoint presentations.

According to Flyvbjerg (2013, p. 170), choosing to do a case study as the strategy of inquiry is not so much a choice of methodology but rather “a choice of what is to be studied”. Many academic attempts have not just failed to exactly define the essence of a case study but rather contributed to a “definitional morass” (Flyvbjerg, 2013, p. 170). He recommends therefore using the straightforwardly definition as it is found in the Merriam-Webster’s dictionary (Case Study, 2013): A case study is “an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to the environment”.

Two aspects of the definition are striking: First, *developmental factors in relation to the environment* are dealing with situations and events which have evolved over time and made a significant contribution to the whole context as such. Following Yin the context is essential because case studies are aiming at understanding the “complex social phenomena” while at the same time retaining “the holistic and meaningful characteristics of real-life events” (Yin, 2003, p. 2). According to Hartley (2004, p. 323) the result of a case study research is an analysis of the context and the processes where the phenomenon and its context are not separated “precisely because the aim is to understand how behavior and /or processes are influenced by, and influence context”. Consequently, the input elements strategy, history and resources as described in chapter 3 are essential for the analysis of relevance – not just the Programme of Work and its outcome.

Secondly, the *intensive analysis of an individual unit* constitutes a detailed investigation of a single person as well as a complex thing such as a community or a state. Hardley (2004, p. 323) notes that a case study in organizational research may involve “one or more organizations, or groups and individuals operating within or around the organization”. However, according to Stake (1995, p. 2) it is crucial that the unit has to be specific rather than general. He refers to the individual unit as an “integrated system” where the specificity is expressed by the boundaries of the system, bringing an objective into focus rather than a process. The specific boundaries of the system are to constrain the case “in terms of time, events and processes” (Creswell, 2007, p. 76). While the determination of some sharp boundaries for a single Centre of Excellence is rather challenging as already mentioned in chapter 3, the determination of boundaries for German hosted COEs is even harder. In terms of *time* the case is bounded by the history of the COE or its predecessor organization respectively. *Events* comprise first and foremost the annual or bi-annual Steering Committee meetings or other COE related Conferences such as the annual Directors Conferences or Conferences to prepare the Programme of Work. Finally, *processes*

refer primarily to internal assessments such as the Periodic Assessment Report or the amendment of mission statements and the Director's Vision respectively.

One of possibly five rationales for a single case design is the *representative or typical case* where the experiences from this single case are assumed to provide information about other endeavours within the same business (Yin, 2003, pp. 40-41). However, others like Gläser and Laudel (2010, p. 98) warn against believing that typical cases may be representative for a whole field of investigation. They link the term *typical* to the characteristic features of a chosen case. In other words: not the quantitative parameters of a case are essential but rather the qualitative ones. But as the case has to be selected prior to the study, the researcher does not know whether the characteristics of his chosen case are typical for the field of investigation. Finally, Flyvbjerg (Flyvbjerg, 2013, p. 179) points out that “formal generalization is overvalued as a source of scientific development, whereas the *force of example* and transferability are underestimated”.

In this case study I will use Germany as a single case (embedded) design as it is described by Yin (2009, pp. 46-53) with two German hosted COEs as embedded units of analysis. The term *embedded* indicates that the case is not treated in a holistic manner but with three subunits that are to be analyzed separately (within case analysis) and afterwards across all subunits (cross-case analysis) and thereby enhancing the understanding of the single case.

Each subunit consists of a single COE, which vary more or less significantly not only in terms of their functional, specialized, or level of scope but also in respect of various structural aspects such as size, budget, total number SNs and the ranks in the leadership. Moreover, although Centres of Excellence are supposed to be joint, clearly one service branch dominates – either the Army (MILENG COE) or Air Forces (JAPCC) or Navy (COE CSW). Following Flyvbjerg I agree with him in so far as the results of this case study may serve as a *force of example*, which could be transferred and utilized to analyze other COEs.

### **4.3 Data Gathering**

The case study makes use of three different kinds of data: interviews, official documents, and open-source materials. First and most importantly, I have personally conducted six semi-structured on-side interviews with German military personnel, currently working or having worked inside the COE environment. With the exception of one interviewee who was not available due to time constraints, it was possible to gain access to those German officers who are occupying a position as Director, Executive Director, or as Branch Head. The interviewees

include<sup>63</sup> the Director of the Military Engineering COE as well as his predecessor, the Executive Director of the Joint Air Power Competence Centre and his Branch Head 'Concept & Development', the Executive Director of the COE for Operations in Confined and Shallow Waters, and finally the Assistant Branch Chief, Planning Department I 2, Federal Ministry of Defence.

Yin (2003, pp. 78-80) recommends conducting a pilot case study as a final preparation for data collection. I had the opportunity to gain general information on Centres of Excellence prior to the interview phase by thoroughly discussing the topic with the former Director of the Civil Military Cooperation COE<sup>64</sup> which is hosted by the Netherlands. However, while this discussion cannot be considered a pilot case as provided by Yin, it helped me in developing relevant lines of questions for the interview guide. Prior to conducting the interviews the interviewees were asked by a letter to volunteer for an interview. The interviews were based on an interview guide (Annex A) that has been informed by the basic components as they are defined in the conceptual framework. The preparation of the interview guide is based on guidance by the work of Gläser and Laudel (2010, pp. 142-152). The guide was used for all interviews, however, with some moderate modifications in accordance with the position held by the respective interviewee. Furthermore, three interviewees asked to be provided the interview guide in advance and one interviewee reserved the right to make comments on the interview transcript as well as to approve his translated quotations. The interviews were conducted in German and lasted between 61 and 117 minutes with an average of 84 minutes. As all interviewees consented in recording the interviews, they have been completely transcribed to be further analyzed. Gläser and Laudel point out that there are no common rules for the transcription of interviews. Therefore I applied their recommended rules: use standard orthography; drop non-verbal expression as they are not necessary for understanding the context (e.g. laughter); mark characteristic answers such as a hesitant 'yes' or 'no'. The transcripts were all created by the author, with about 8000 to 17000 words in length and an average of 11000 words. All quotations used in this study have been translated from German into English by the author.

Secondly I made use of official documents provided by NATO (e.g. MC Concept for COEs) or the respective COEs (e.g. MOUs). These documents are all NATO unclassified and some MOUs are even accessible on open internet websites<sup>65</sup>.

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<sup>63</sup> more details can be found in Annex B

<sup>64</sup> While the CIMIC COE is located in the Netherlands, both Germany and the Netherlands have taken responsibility as Framework Nations.

<sup>65</sup> However, as this was not the case for the German hosted COEs, MOUs from some other COEs are accessible.

Finally I made use other COE related documents such as reports, PowerPoint presentations, records of Steering Committee meetings, annual reports, or journals.

Although some of the provided documents are accessible from the internet without permission, most content was available by access to ACT's Transformation Network (transnet) website. Moreover, the MILENG COE granted access to their internet based knowledge portal which provided me a unique opportunity to get information specifically on MILENG COE related topics. Access to both websites is not restricted and can be requested as long as an official business email is provided by the applicant. The JAPCC, by contrast, runs an open website that provided me almost all documents on the JAPCC that I used for this study. Finally, the three COEs were very helpful and cooperative in providing me with almost all information I requested.

The analysis of the semi-structured interviews was performed in the style of a qualitative content analysis as described by Gläser and Laudel (2010). The purpose of qualitative content analysis is to reduce the quantity of raw material systematically by extracting essential information from documents (i.e. interviews, reports, etc.) and process only this information during the analysis (Gläser & Laudel, 2010, p. 199). The heart of this procedure is the extraction of information. This means that the analyst has to carefully read a text and decide based on a theoretically derived set of categories what is relevant for the further analysis. For the data analysis it is important that categories are derived from the same theoretical framework that already guided the data collection. Thus the interview guide was informed by the same analytical model as the analysis of the interviews afterwards.

Following the general definitions of these categories (i.e. strategy, history, work, etc.) it is possible to extract information and divide it among the categories. Thus the analyst gets a database<sup>66</sup> which is separated from the original documents. However, all extracted information retains a reference to its origin. Thus it is possible to use the database to identify patterns of behaviour and go back to the origin to cross-check findings and, as appropriate, quote the source.

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<sup>66</sup> The database was created by using MS Excel.

## 5. The Case: Germany and German hosted Centres of Excellence

From the very beginning, almost all allies – notably Germany – have been actively engaged in varying degree to make their contributions and provide resources (financial means and military personnel) to this new kind of multinational endeavour. Within just over four years – from December 2004 until March 2009 – four German funded COEs were successfully established and soon afterwards accredited by NATO. By that time, Germany was the Framework Nation (FN) of 25 percent of all NATO accredited COEs. Moreover, Germany joined five other COEs as a Sponsoring Nation (SN) within that time period, and by the end of 2010 Germany was represented in 11 of 15 COEs.

As of writing, Germany is represented in 11 of 18 NATO accredited COEs while being Host Nation for three of them: (1) the Centre of Excellence for Confined and Shallow Waters (COE CSW) in Kiel; (2) the Joint Air Power Competence Centre (JAPCC) in Kalkar; and (3) the Military Engineering Centre of Excellence (MILENG COE) in Ingolstadt. Moreover, The Netherlands and Germany have taken responsibility as Framework Nations for the Civil-Military Cooperation COE (CCOE) which is located in Enschede (NL). Altogether, this kind of engagement is almost unique within the Alliance as only The Netherlands share a similar strong commitment.

However, it should be noticed that according to the German Federal Budget Law for 2012, section 14, total expenditures (approx. 1.2M EUR) for participation in 11 COEs account for just 1% of the German share to the NATO budget (BMVg, 2012).

### 5.1 Military Engineering Centre of Excellence (MILENG COE)

The Military Engineering Centre of Excellence (MILENG COE) has been established on 09<sup>th</sup> July 2008 as national representatives of ten NATO members<sup>67</sup> signed the MOU at HQ SACT in Norfolk (USA). After having received NATO accreditation eight month later<sup>68</sup>, the Centre was officially inaugurated in Ingolstadt<sup>69</sup> on 27<sup>th</sup> March 2009 as the twelfth NATO accredited Centre of Excellence. One year later, five other NATO members<sup>70</sup> joined the Centre and since the end of 2012 the MILENG COE consists of sixteen NATO countries<sup>71</sup>, making it the second largest COE within NATO in terms of the number of Sponsoring Nations.

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<sup>67</sup> Canada, Czech Republic, France, Germany, Greece, The Netherlands, Norway, Romania, Turkey, and the UK

<sup>68</sup> the official date of accreditation was the 9<sup>th</sup> March 2009

<sup>69</sup> Ingolstadt is located in Bavaria, approx. 100km north of Munich

<sup>70</sup> Belgium, Denmark, Italy, Poland, and the US signed the MOU on 26 March 2010

<sup>71</sup> Spain joined in November 2012

Military Engineering is defined in a NATO policy called MC 0560/1<sup>72</sup> as “the engineer activity undertaken, regardless of component or service, to shape the physical operating environment” (NATO, 2012d). These activities traditionally consist of four capability areas which have been categorized as mobility (e.g. gap crossing or road construction), counter mobility (e.g. obstacles or minefields), survivability (e.g. force protection), and general engineer support (e.g. water supply).

These four capability areas have yet been covered by the *Concept, Interoperability and Capabilities (CIC) Branch*, which is one of three branches within the MILENG COE. However, for more than two years the concept and thereafter the Operational Memorandum of Understanding have been subjected to a comprehensive revision. As a result the Steering Committee approved the draft of a new concept in October 2012. Both the new concept and more importantly the amended OP MOU<sup>73</sup> are most likely to be re-signed within the next few months. Consequently, the remainder of this section takes this important step into account as not only the structure has slightly changed but also the mission has been further developed.

### ***History***

The MILENG COE is not an entirely new organization as it originated from the 1977 established Euro NATO Training Engineer Centre (ENTEC) which was charged with the task to promote engineer interoperability by providing training. Additionally, since 1995 ENTEC was also tasked to serve as a focal point for information exchange. Although ENTEC was represented with a Working Group in the NATO Training Group<sup>74</sup> (NTG), it remained an independent organization, only accountable to its Sponsoring Nations<sup>75</sup> – just as COEs nowadays.

As a result of the ENTEC Working Group Meeting in Rome 2006, participants came the conclusion that “ENTEC was no longer suited for the current requirements for training and information exchange” and that, “[i]n order to stay relevant, [...] ENTEC should transform into the MILENG COE” (MILTECH, 2010, p. 38). This decision was, however, preceded by a personal evaluation of the former ENTEC director who took command in 2005. His discontent about the effectiveness of ENTEC led to the suggestion to either dissolve ENTEC or to develop it further. His successor describes the situation as follows: “I think ENTEC realized that the Cold

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<sup>72</sup> Military Committee Policy for Military Engineering

<sup>73</sup> Currently there exists an unsigned consolidated version including all amendments as of December 12<sup>th</sup> 2012

<sup>74</sup> Originally formed as the EURO/NATO Training Group in 1970, the NTG replaced its predecessor in 1993. Until 1999, Germany provided consistently the Chairman and Secretary of the NTG, before a staff element was established at NATO HQ within the IMS. As part of the realignment of the NCS after 2002, the NTG was subordinated to HQ SACT in January 2004 (NATO, \*2004).

<sup>75</sup> ENTEC was initially founded by 5 Nations (CAN, GER, NLD, UK, USA) and included 20 members in 2006.

War was over and that it had to be put on new footing. Consequently the NATO COE concept was taken and developed further as one of the first domains” (Interview Radlmeier).

By that time, however, the only COE that was already established was the JAPCC and therefore asked to offer a first impression of how a COE might look like. As the former ENTEC director remembered: “Generals went in and got out, 97 people working on a strategic level and having money to burn – it was then I knew what a COE roughly could be” (Interview Scholz).

The development, however, was not without obstacles because the whole approach was initially bottom-up. From the very beginning there was discord between ENTEC and the German Army Engineer School about the necessary number of military personnel for the new MILENG COE. Even though the Engineer School generally assisted ENTEC on its way, there was no really strong and sustainable support. However, a change in command of the Engineer School in late 2006 brought about some slight improvements. Nevertheless, the former ENTEC director points out that “[t]he school never really accepted the fact that the COE is an independent and NATO related institution. Even today they sometimes view the COE as being part of the school” (Interview Scholz).

Apart from these initial difficulties ENTEC succeeded fairly quickly to develop a good relationship with key personnel inside the German Army Staff which was, by that time, integrated in the Ministry of Defence. Most importantly the Chief-of-Staff of the German Army, General Budde, was very soon convinced about the idea and eager to have an ‘army-related’ Centre of Excellence. Therefore he personally supported the establishment of the MILENG COE and participated in the inauguration as the highest military representative of the host nation Germany. However, it should be noticed that ENTEC was not the only potential COE candidate within the German Army – it had at least one competitor. Anyhow, ENTEC was in a better starting position as it had a long tradition as a multinational organization and Military Engineering was considered to be a niche capability.

### ***Resources***

Regarding the costs for the establishment of the MILENG COE, Germany as Framework and Host Nation donated approx. 300.000 Euro for establishing the initial IT system and provided a completely new building in the amount of more than one million Euro (Interview Scholz). By contrast, the MILENG COE’s annual budget is 400.000 Euro. As for all COEs financial contributions are linked to the number of assigned officer posts as reflected in the corresponding

MOU. The cost share amounts to 20.000 Euro<sup>76</sup> per officer capita which is in the upper third compared with all NATO COEs<sup>77</sup>. While each of the 15 Sponsoring Nations holds one officer post, Germany accounts for five officer posts. This means that Germany accounts for 25% of the annual budget, respectively 100.000 Euro. However, measured against the German contribution for multinational sponsored HQs within NATO and other IOs which is about 14.5Mio Euro (BMVg, 2012) as estimated for 2012, this is less than 0.7%.

As a general rule the Host Nation is expected to take responsibility for the majority of posts related to administrative tasks. ACT even holds the view that the Framework Nation is obliged to provide all support staff. According to Col Radlmeier this is because Sponsoring Nations are not really interested in these posts. On the contrary, they seek to cover posts related to operational activities – in the case of the MILENG COE the figure is over 75%. Thus, Germany accounts in total for 12 posts and provides another 5 personnel<sup>78</sup> on a voluntary basis<sup>79</sup>.

Mandatory annual cost shares are frequently exceeded by additional costs which can be traced back to payable individual allowances. Currently there is a growing tendency that nations withdraw their NCOs from the MILENG COE. Moreover, some nations are reluctant to fill and/or to send a replacement for their officer obligations. The following examples are to illustrate these challenges.

For more than three years Romania had problems to fill its post Chief Support Branch, let alone to fill the promised NCO post. Great Britain and the USA each released a NCO post. It took Italy almost two years after they joined the COE in March 2010 to fill their post as Cell Chief Counter-Mobility (OF4). Great Britain even considered withdrawing their deputy director as a result of personnel reductions within the Royal Engineer Corps. According to Colonel Radlmeier this could only be mitigated by intensive talks on the level of national Chief Engineers. The latest example is yet a theoretical one because it is until now not clear whether Norway is going to send a replacement for the officer within the Training & Education Branch in the middle of 2013.

### ***Strategy***

Decisions of the past may give a perception of strategy and how it is applied. As a starting point I focus on the mission of the MILENG COE as it is defined in its concept of 2008 where a

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<sup>76</sup> as of 2011, 2012, 2013

<sup>77</sup> cost share differs between 6.000 and 27.000 Euro (NATO, 2013)

<sup>78</sup> as of December 2012

<sup>79</sup> Posts which are not assigned to a nation can be filled by so called Voluntary National Contribution (VNC).

commonly used and well-known triad can be found: *providing subject matter expertise* in order to *support transformation*, thus *enhancing interoperability*.

This is also reflected in NATO's corresponding policy document MC0560/1<sup>80</sup> of 2012 which additionally highlights that MILENG expertise is needed at *all* levels of command. This is important because – in the concept of 2008 – it was originally assumed that the COE will primarily focus at the operational and tactical level and that support to the strategic level will only be provided within available capabilities. The former ENTEC director justifies this focus with some supposed demands of the Sponsoring Nations: “We have to stay on the ground. We must support the soldier who is deployed abroad and has his boots on the ground. That’s important and this is where we have to work together. That’s what nations want” (Interview Scholz). Moreover he points out that the body of personnel is not sufficient to cover all three levels of command equally. He further states that “[a]t the strategic level it is all about writing papers that no one needs. Nations need experiences and if we predominantly focus on the strategic level we would ignore the necessity of the COE as an entity for multinational engineering expertise”.

However, about two years after being established the COE recognized the need to make some changes to the original concept. After approval was obtained from the Steering Committee the COE staff reviewed their concept and as a result, a draft of the new concept was approved by the SC in October 2012. Three changes are most essential: First, the new mission is “to enable the development of Sponsoring Nations’ and Alliance military engineering capability and interoperability, in order to enhance the effectiveness of military engineering support to NATO and other operations” (MILENG COE, 2012, p. 2). Remarkable is the fact that enhanced *interoperability* has changed position. While it was the objective in the old concept it is now a means to achieve the new objective which is called enhanced *effectiveness*. A second fact which is striking is the order in which Sponsoring Nations and the Alliance are mentioned in regard to the development of capabilities – even though the final support is dedicated primarily to NATO operations.

Second, what has formerly been described as ‘boundaries and scope’ is now replaced by a much more detailed mission intend which points out that the MILENG COE mission is to be delivered at all three levels of command in accordance with the corresponding NATO policies and doctrines. Moreover, concrete and conceivable contributions to each level are thoroughly described and provide for an unambiguous understanding. The current director portrays the

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<sup>80</sup> Military Committee Policy for Military Engineering

situation as follows: “Basically, it has been about reflecting the latest doctrine. Moreover the essential policy document MC 0560/1 was endorsed and put into effect in relatively short time.” (Interview Radlmeier). At this point it is essential to notice that the MILENG COE was heavily engaged as key contributor to the review of the MC 0560/1 and is currently the custodian<sup>81</sup> of joint and tactical MILENG publications<sup>82</sup>. In this respect this is a well suited way to further the own mandate.

Third, the concept includes a vision. This vision describes the image of an ideal stage such as “to ensure the MILENG COE is considered an indispensable component of the MILENG COI, equipped with the resources and capabilities to effectively contribute to, and influence thinking at the highest levels of NATO”. Moreover, the vision points out the significance of being highly regarded for effective training support, the provision of expertise, and information sharing. In summary, the MILENG COE is currently adapting its strategy to the opportunities as well as the demands of its environment. While the old mission was rather fluffy formulated the proposed new mission in combination with the intent provides a much better perception of what the customers are supposed to get for their resources. Finally the vision has taken the task to serve as a lighthouse on the horizon for its participants.

### ***Structure***

As already mentioned the structure of the MILENG COE is currently under revision because of two main reasons. First, although SNs have permanently assigned posts, realities sometimes call for some internal adaption, however, not without approval of the corresponding nations. For example, two posts<sup>83</sup> are currently covered neither by the initial concept nor by the MOU. However, these posts have proved to be essential for operating the COE. After direct consultations between the COE director and the concerned SNs both posts could be occupied. And the second reason is closely related to the first one and clearly expressed by the COE director’s will “to be attractive for other potential Sponsoring Nations, too. Actually, there are hardly any posts which may attract other nations although there are some interests” (Interview Radlmeier). Thus the MILENG COE decided to open the range of posts to be better able to promote itself and attract new members. However, while all posts on the OF4 level are already

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<sup>81</sup> In brief a custodian prepares a study draft and circulates it through the respective Working Group for comments and reviews in light of comments received (NATO, 2011, AAP-47, 0229)

<sup>82</sup> such as the AJP-3.12 “Allied Joint Doctrine for Military Engineering” or the ATP-3.12.1 “Allied Tactical Doctrine for Military Engineering”

<sup>83</sup> These posts comprise the Information Knowledge Management (IKM) and the Operations (Ops) Officer posts.

assigned, new posts are available just on the OF2/3 level<sup>84</sup>. This could be regarded as being both an advantage and disadvantage at the same time, depending on what a potentially new member is seeking to achieve with its participation. However, it proves to be difficult to clearly figure that out. According to LTC(ret) Scholz all founding members received the positions they had envisaged for themselves. Hence, a closer look on the initial structure might give some more implications on that topic.

Taking into account the structure of the MILENG COE based on its concept of 2008 we find the key positions assigned as follows. The Centre is made up of three branches which are led by the *Command Group*<sup>85</sup> with a German Colonel (OF5)<sup>86</sup> as director and a British Lieutenant-Colonel (OF4) as deputy at the top. According to the former ENTEC director there has never been a real discussion about the topic of rotation. “We excluded the question of rotation because this might have caused big problems during preliminary negotiations as virtually all nations would have sought to be included in the rotation. Hence we concluded that while Germany is Host Nation and bears the main costs, [...] we will provide the director” (Interview Scholz). Moreover, the British officer was essential to push forward the whole process of becoming a COE not just because his language skills were assessed to be of value for negotiating with ACT but mainly because “[he] was first and foremost a COE officer rather than a British officer” (Interview Scholz).

The motivation to develop ENTEC further was primarily driven by the German, the British and the Dutch officer within ENTEC. While the former Nations were already earmarked to provide the director and his deputy, the latter received the post as Branch Chief of the aforementioned *Concept, Interoperability and Capabilities (CIC) Branch*, the largest branch, consisting of 12 military personnel. Furthermore the *Training and Education (T&E) Branch* received an American Branch Chief (OF4) and consists of 9 military personnel. According to LTC(ret) Scholz the Americans didn’t get enthusiastic about establishing a MILENG COE. Indeed, their delayed willingness to sign the MOU may serve as an indicator for this kind of reluctance. As LTC(ret) Scholz further points out: “They didn’t perceive it as an advantage but rather viewed the Centre as an opportunity to have a foot in the door if they would fill a post”; in the sense of staying involved in what European military engineers are dealing with. However, due to their

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<sup>84</sup> officers in the rank of Captain and Major (or equivalent)

<sup>85</sup> Additionally, the Budget and Finance Cell is attached to the Command Group

<sup>86</sup> NATO codes for grades of military personnel according to STANAG 2116: While ‘OF’ represents an officer’s grade, ‘OR’ stands for Other Ranks such as Non-Commissioned Officers (NCO). This eases comparison among NATO countries.

great experiences in the field of military engineering they were earmarked to lead the training section.

Finally, a Romanian Branch Chief (OF4) is responsible for the *Planning Coordination & Support (PCS) Branch* which comprises ten personnel. However, this post had been vacant for more than three years until the end of 2011. This simply begs the questions why Romania has applied for that position at all.

Turning focus to the new concept reveals that the manning level has been increased from 38 posts to 50 posts in the new structure, however, with additional posts not above OF2/3 level. Furthermore and in line with an updated organizational chart, the name of two branches and their internal arrangement have been changed. First, the former CIC branch has been renamed to *Policies, Concepts & Doctrine Branch* and gained four additional officer posts. The new name clearly reflects the changed focus towards the strategic level regarding the Centre's contribution to NATO policy development and doctrine writing. Second, the former PCS branch has also changed name to *Support Branch* as the aspect of coordination has been transferred under the responsibility of the deputy director. Moreover, the T&E Branch gained two additional posts, one for Advanced Distributed Learning (ADL) and one for the coordination of collective training.

However, it remains slightly surprising that although the MILENG COE now also fully incorporates the strategic level, the only post on OF5 level (full colonel) remains the posts of the COE director. Following COL Radlmeier you have to be a Full Colonel on an international setting in order to get heard. Or to put it with LTC ret. Scholz: "On the international scene you ought to have a Full Colonel. You cannot run around out there being just a Lieutenant Colonel. [...] Even if you have good arguments you will not get heard because being a two-star general is always the better argument. Quite simple!"

And while all branch heads are still on OF4 level this may also help to explain why new posts are just on the OF2/3 level and not on OF4 level. However, I must point out that this is my own speculation.

### **Work**

Generally, the MILENG COE's Programme of Work is based on some core tasks as they are defined in its Operational Memorandum of Understanding and further elaborated in the new COE concept. Specific issues arise primarily from NATO and Sponsoring Nations requests and form therefore an important point for further analysis. Meanwhile, as Col Radlmeier notes, the

POW consists of almost 70 percent permanent tasks. Allegedly one of the most influential tasks is the Centre's function to serve as the Secretariat for the NATO Senior Joint Engineer's Conference (NSJEC)<sup>87</sup>. Moreover, the Centre provides main support for the NATO MILENG Working Group (MILENG WG)<sup>88</sup> and is granted responsibility to act on behalf of it as custodian<sup>89</sup> of Allied Joint and Tactical Military doctrines. Furthermore the Centre has been given the task to liaise with several other Working Groups within the Alliance (NATO, 2012f, p. 13). As Col Radlmeier puts it more bluntly: "We are the working muscle for the Military Engineering Working Group. [...] Of course, you could ask: Who is in charge for writing doctrine in NATO? The Allied Joint Publications are still a product of the NSA/MILENG Working Group, represented by all nations. However, we are the working muscle, in a few cases even the custodian."

Consequently, these tasks are essential for both the COE and for ACT. While the COE seeks to make itself indispensable for its environment and to raise its profile by furthering its own mandate, ACT is almost dependent on the Centre's expertise and working power as ACT has hardly any subject matter experts in regards of MILENG in its own ranks.

On the contrary, with a view to the Sponsoring Nations' demands, it proved to be difficult to get them substantially involved. In terms of Germany LTC(ret) Scholz points out that "[w]e always tried to get tasks and talked with the German Army Engineer School. [...] Although we were not viewed as a competitor there was, however, no intention to provide us with tasks in the sense of *This is what you can do for us*". However, one should bear in mind that the Engineer School until 2012 had its own division for engineer development<sup>90</sup> (Gruppe Weiterentwicklung), handling these tasks presumably independently. It is therefore interesting to notice that just in 2012, Germany has for the first time made a demand on the MILENG COE to investigate potential solutions of how to substitute landmines by other means. Thus, after being approved by the Steering Committee the demand became part of the POW. However, almost as interesting as

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<sup>87</sup> The conference is aiming at enhancing the Alliance' overall MILENG posture (NATO, 2012d, p. 5) and to bring together NATO senior engineers, particularly from NCS and NFS, to develop a common vision and objectives for the development of NATO military engineering (NATO, 2012e, Enclosure 1).

<sup>88</sup> In short, this Working Group is supposed to improve NATO military engineering capabilities in the fields of doctrine, organization, training, material, leadership, personnel, facilities, and interoperability (DOTMLPFI) (NATO, 2011e, p. 2).

<sup>89</sup> The development of joint doctrine publications is conducted by a NATO WG that normally assigns project custodianship to a nation, SC, COE or other NATO Military Body. The custodian will usually designate authors and/or editors for AJP's but retains ownership of the project and is responsible throughout the life of the project (NATO, 2011b, No.0229)

<sup>90</sup> In the wake of the restructuring of the German Armed Forces (Bundeswehr) a decision was made that all division for development within the German Army are to be centralized in a single department. This new department, called *Amt für Heeresentwicklung* (Department for Army development), has been established in Cologne in October 2012.

this *virginal* German demand is the fact that “This was a national demand and we had not received any pure [national demands] in the past. [The POW] was always focused on NATO tasks”. (Interview Radlmeier). However, with a view on Germany LTC(ret) Scholz also admits that some of “[t]he other nations were more diligent, especially the smaller ones. They were eager to get something back. [...] They even wanted us to write their concepts so that they could save their own personnel.” And indeed, as COL Radlmeier confirms this tendency: “Today there are Nations such as the Netherlands who have turned away from writing isolated national doctrines. They refer to multinational doctrines where this is feasible”. And even the *Bundeswehr* has just recently introduced an official document<sup>91</sup> about tasks related to Military Engineering. This new kind of alignment can be regarded as a signal towards developing a common understanding with NATO partners (Otto, 2012, p. 65). Anyhow, this cannot belie the fact that demands seem to be rather implicitly articulated than by posing concrete them. Hence, I turn my focus on tasks that are related to training and education in order to complete the picture.

After being established, the Centre’s POW for 2009 was designed to enable its staff to immense into the new environment and to put prominence on training courses – something that can be viewed as a logical step in “building on the spirit and success of ENTEC” (MILENG COE, 2010) and as an contribution to its primarily focus on the tactical/operational level of command as well. Therefore, the MILENG COE has scheduled four different kinds of courses, provides additional Mobile Training Teams (MTT) and supports NATO’s own education facilities with subject matter expertise.

Against this backdrop the question arises as of how nations intent to utilize their centre. The implicit way would mean to make business as usual without making demands. On the other hand the German example is a clear illustration of how an explicit way may look like. However, being explicit calls for knowing exactly what is needed and what can be achieved.

### ***Products & Services***

Regarding the output I will focus on training and education. Figures for 2009 draw a somehow diffuse picture about the significance of courses. While SNs submitted requests for 172 students to participate in various training courses, only 105 students attended these courses. Indeed, this may be the result of long-term planning issues but some nations even didn’t send a request, let alone participants.

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<sup>91</sup> Weisung für die Wahrnehmung der Aufgabe Military Engineering in der Bundeswehr

Overall six of fifteen nations account for almost three quarters (73%) of all course participants with Canada (15/17), France (17/19) and the USA (13/6) among the top three. One year later 259 requests are faced by 148 participants.

Others, such as the Netherlands (2/15), Germany (4/18), Poland (5/16), Belgium (9/23), and Norway (11/26) are far below the average of 61%. Only the USA (13/6) and Denmark (4/2) send more participants as initially requested while Turkey send four participants without having submitted a request at all (MILENG COE, 2010).

## 5.2 Joint Air Power Competence Centre (JAPCC)

"[W]ithin NATO there is no operational level or strategic level staff body in dealing with air power issues [and] there is a need to modernise NATO's joint air power capabilities" (Osinga, 2005). Joint Air Power as it is described in the JAPCC concept, can be viewed as the "synergistic application of air, space and information systems from and for all services to project military power" (German Ministry of Defence, 2003, p. 3). According to Osinga<sup>92</sup>, the two aforementioned reasons account for the establishment of the Joint Air Power Competence Centre, the first-ever established and accredited NATO Centre of Excellence. Located in Kalkar<sup>93</sup>, the Centre was established on 13<sup>th</sup> December 2004 as sixteen NATO members<sup>94</sup> signed the MOU at HQ SACT in Norfolk (USA). Some five month later, on 01 June 2005, the JAPCC gained its NATO accreditation. As for now, Romania has been the only new member who joined as seventeenth SN in early 2006. To date no other COE has attracted more SNs than the JAPCC. Moreover, with a total of 97 posts the JAPCC is only second to the bi-national Naval Mine Warfare COE in Belgium. Of particular note is that Germany does not provide the director of the JAPCC. Instead, the JAPCC is headed by a U.S. four-star general<sup>95</sup>, who also serves as Commander, HQ Allied Air Command<sup>96</sup> in Ramstein (Germany) and as Commander, US Air Force in Europe and in Africa. Germany, however accounts for the position of the Executive Director, currently Lieutenant General Joachim Wundrak, who holds a triple-hatted position as

<sup>92</sup> Air Commodore prof. dr. Frans Osinga was the JAPCC liaison officer to ACT (2005-2008)

<sup>93</sup> Kalkar (North-Rhine Westphalia) is situated about 120km north-west of Cologne, near the German Dutch border and adjacent to the Combined Air Operations Centre (CAOC) in Uedem.

<sup>94</sup> Belgium, Canada, Czech Republic, France, Germany, Greece, Hungary, Italia, The Netherlands, Norway, Poland, Portugal, Spain, Turkey, Great Britain, and the United States of America

<sup>95</sup> As of Mai 2013 the post is vacant because the former Director, General Philip Breedlove, has assumed command as U.S. European Command Commander and NATO's Supreme Allied Commander Europe (email correspondence with JAPCC).

<sup>96</sup> since 1<sup>st</sup> January 2013; formerly Headquarters Allied Air Command Ramstein (2010-2012) and Component Command-Air Headquarters Ramstein (2004-2010)

he additionally serves as Commander, Combined Air Operations Centre (CAOC-2) in Uedem and as Commander, German Air Force Air Operations Command<sup>97</sup> (GAFAOC) in Kalkar.

### *History*

The JAPCC succeeded the Reaction Forces (Air) Staff (RFAS), which was originally activated in April 1993<sup>98</sup>. The RFAS was created to facilitate detailed planning for NATO Reaction Forces (Air) and consisted of 80 military personnel, headed by a German three-star general (NATO, 1998, p. 253). Virtually, the RFAS was the smaller *air* counterpart of the HQ ARRC which was activated as part of the Reaction Forces (Land) just six month earlier. However, while the RFAS was originally established to focus on the tactical and operational level, it revealed itself more and more as a staff element concerned with preparing studies (Interview Wundrak).

On 16 December 2002, not more than four weeks after the NATO Summit in Prague, the German Chief of Air Staff, General Gerhard W. Back, who had also headed the RFAS in 2000<sup>99</sup>, outlined the German views on the creation of the JAPCC as a Centre of Excellence. His thoughts felt obviously on fertile soil among the other NATO Chiefs of Air Staff (CoAS). As LtGen Wundrak notes:

“[While] Germany did not want to wipe out the RFAS but rather create something with a stronger focus on the future, [NATO CoAS] recognized that there was the need for a body besides the day-to-day business and the daily struggle to fulfil one’s mission – something more sophisticated that would allow for greater *freedom of thought*<sup>100</sup> about Air and Space Power related issues” (Interview Wundrak)

By the end of July 2003, the German Air Force Staff had drafted the JAPCC concept – eight month earlier than the corresponding NATO COE concept was available. Curiously enough, the JAPCC is one of two COEs that do not bear the prefix COE<sup>101</sup> in their names which might be explained by the fact that the drafters of the JAPCC concept refer to a Centre of Competence rather than to a Centre of Excellence. The JAPCC’s mission included four tasks of which the first one is striking: “ensure that the [...] roles of multinational and Joint Air Power are strongly supported at the strategic level of NATO’s Command Structure” (German Ministry of Defence,

<sup>97</sup> Kommando Operative Führung Luftstreitkräfte (KdoOpFülW)

<sup>98</sup> The RFAS was, however, granted the status of an international military HQs by the NAC on 02 October 1992 (

<sup>99</sup> As Commanding General of the Luftwaffenkommando Nord, General Back was also Commander of the ICAOC and the RFAS (1999-2000).

<sup>100</sup> emphasis by author

<sup>101</sup> The other COE is the French hosted *Analysis and Simulation Centre for Air Operations* (CASPOA) which was originally establish already in 1997 and accredited as NATO COE on 18 February 2008.

2003, p. 6). Obviously the JAPCC was intended to serve as a kind of Air Force agent within an ever smaller NCS. This impression was then reiterated by the former Chief of German Air Force, Lt Gen Stieglitz, in an article in the first JAPCC Journal in 2005: “[T]he JAPCC in Kalkar will be the face and the voice of Joint Air Power within the transformation process of NATO” (Stieglitz, 2005, p. 28).

Interestingly, the latest COE concept template, endorsed by ACT on 30 April 2013, still covers the main topics of this very first COE concept. This clearly illustrates the still existent imprint Germany has left on the conceptual framework for establishing Centres of Excellence.

Although the JAPCC would most likely have also been viable on its own (Interview Wundrak), it was an alluring prospect to get a national niche-capability funded on a multinational basis and, at the same time, “get a foot in NATO’s door” (Interview Theuerkauf). General Back then invited the RFAS-Nations to consider also sponsoring the JAPCC. According to the current Branch Chief of JAPCC’s Concept and Development Branch, Colonel (GS) Thomas Theuerkauf, the idea to establish the JAPCC was a clever move on part of Germany, leading to some kind of a win-win situation. While it allowed NATO for getting a quality add-on at no costs, Germany would gain the opportunity to actively influence the development of Air and Space Power within NATO (Interview Theuerkauf).

In December 2003, after the Director RFAS had proposed some Terms of Reference, the staff structure, and an implementation and transition plan, the German Air Staff initiated the consultation process to develop the MOUs. During the *White Smoke* conference held in Kalkar on 16 July 2004, participants from 16 SNs agreed on the filling of posts and officially confirmed their bids one month later. However, not all former RFAS-Nations joined the JAPCC. For example, Denmark withdrew their participation as they claimed that “development and transformation of Air and Space Power is far too important to be left outside the NATO Command Arrangements” (Interview Theuerkauf).

Finally, MOUs were signed by the end of 2004 and defined the JAPCC’s official mission. In essence, the JAPCC is supposed to facilitate Joint Air Power Transformation in support of SACT. Thereby first priority of work has to be ensured for ACT requested services or products in the field of concept development and experimentation; doctrine development; standardisation and interoperability; capabilities and defence planning; education and training, exercise, evaluation assistance and lessons learned activities; and finally military cooperation with partners on transformational issues (JAPCC, 2004). However, while the term *mission* is supposed to give “a clear, concise statement of the task [...] and its purpose” (NATO, 2012a) the

originally mission of the JAPCC covers virtually all aspects of transformation in accordance with the motto: *"A lot helps a lot!"*. Anyway, according to the first Assistant Director of the JAPCC Transformation Division, British Air Commodore Martin Halsall, the Director's initial Vision for the JAPCC was quite simple: "in essence, the Director's vision is to enable NATO's effective and efficient use of Joint Air and Space Power" (Halsall, 2005). As I will show, this vision was to become an important part of the JAPCC mission statement some time later.

To sum up, the German Air Force had seized the moment of NATO transformation in the light of an ever leaner and cost effective NATO Command Structure to upgrade an existing organization, the Reaction Forces Air Staff, in order to facilitate and enhance Joint Air and Space Power Transformation within the then new NCS. Thus they killed two birds with one stone. On the one hand, Joint Air and Space Power – build on a solid multinational ground and influenced by a substantial imprint of the German Air Force – was strengthened within the NATO Command Arrangements. On the other hand, Germany contributed actively to NATO's transformation process by providing a high-end capability, delivered free of charge. Finally, armed with a vision of to enable NATO to economically use its Air and Space Power assets, the JAPCC was given a prosperous start in its future.

### ***Resources***

As stated in the Operational Memorandum of Understanding Germany as Framework Nation is responsible to provide the facilities of the JAPCC. They are co-located within the Kalkar German Air Force Barracks and consist of one office building for the staff and a high quality conference centre<sup>102</sup>. However, the refurbishment of the latter was paid by the JAPCC's own budget and amounted to approximately €450.000. Moreover, Germany renders reimbursable support such as furnishing, heating and electricity, or office equipment and stationery for the JAPCC.

Since the JAPCC has been established the average annual budget is about one million Euros, resulting in a cost share of approximately €14.300<sup>103</sup> for each officer which is slightly below the COE average<sup>104</sup>. In respect to the post allocation Germany accounts for 18 officer posts out of 68

<sup>102</sup> Officially opened on 05 March 2007, the centre consists of a small and a large conference room, syndicate rooms, and a library (JAPCC, 2008).

<sup>103</sup> based on a six-year average; figures from JAPCC Annual Reports (JAPCC, 2008, 2009, 2010a, 2011b, 2012, 2013a)

<sup>104</sup> cost share differs between 6.000 and 27.000 Euro (NATO, 2013b)

bids in total. Thus Germany's contribution is about 26% of the annual budget which amounts to roughly €260.000<sup>105</sup>.

Besides the Steering Committee the JAPCC is supervised by a Senior Resource Committee (SRC) which consists of representatives from all SNs and which is scheduled to meet at least once a year. This Committee is primarily responsible to approve and make decision on budgetary issues (such as to approve the annual budget) and to work on MOU related topics (such as to propose amendments). According to the JAPCC's 2012 Annual Report, several Sponsoring Nations began in 2010 to withdraw money and manpower from the JAPCC. For the first time since a five-year budget plan has been established in 2010, the SRC refused to provide full support for it. Instead, a reduction of €29.000 was directed for 2013 to offset the cessation of two Greek posts as Greece, by the end of 2012, has stopped to contribute both money and manpower (JAPCC, 2013a).

### *Strategy*

As defined in chapter 3, strategy can be viewed as a recurring and adaptive process of making decisions. In case of the JAPCC this process gained further momentum in 2010 as the JAPCC initiated its first of currently two internal reviews which was termed *Improvement Campaign*. The campaign revealed that the JAPCC had to better define its annual work streams, key stakeholders, and customers (JAPCC, 2011b, p. 12). Therefore, a *Comprehensive Plan for 2011* was developed in order to address these short-comings. The plan included also a construct that was given the name *Strategy-to-Task Framework*. As this framework is primarily concerned with the work of the JAPC, it is further analysed in the section 'Work'.

The second internal review was launched early 2012 in order to assess how far the JAPCC was truly relevant and successful as NATO's Air and Space Power Transformation Agent (JAPCC, 2013a, p. 13). Before I come to discuss both reviews in some more detail, I want to outline the JAPCC's mission and Director's vision statement, as published in the first JAPCC's annual report of 2007, as a starting point.

Contrary to the JAPCC mission as defined in the MOU of 2004, the Annual Report<sup>106</sup> of 2007 and even the following reports until 2012 refer to the JAPCC mission in a more general way:

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<sup>105</sup> 258.000 Euros (2012); 259.000 Euros (2011); 254.000 Euros (2009); all figures from Federal Budget for the Fiscal Years 2009, 2011, 2012

<sup>106</sup> The first Annual Reports was published in 2008, with reference to 2007.

The JAPCC is the Air and Space Power Transformation Agent for the Alliance and its Participating Nations. It provides innovative and timely advice and subject matter expertise, both proactively and responsively. As a COE with a strategic and operational level focus, we offer independent thought, analysis and solutions with the emphasis on enabling NATO's effective and efficient use of Joint Air and & Space Power (JAPCC, 2008, 2009, 2010a, 2011b, 2012).

Hence, the JAPCC has adopted the role of a Transformation Agent that strives to be both *proactive* as well as *responsive*, not only to comply with demands from its environment, but also to further its mandate. Furthermore, the Director's initial Vision was no longer a vision but part of the mission as the emphasis on economic aspects reveals. The Director's Vision, in turn, as it is stated in all JAPCC annual reports up to 2010, attributed the JAPCC the image of being "NATO's recognised agent for visionary and independent Joint Air and Space Power expertise" (JAPCC, 2008, 2009, 2010a, 2011b).

Nonetheless, this desired image has since then been amended at least two times. First, in the annual report for the year 2011 the image of an agent was converted into the one of a "champion for the advocacy and transformation of Joint Air & Space Power" (JAPCC, 2012, p. 2).

According to Oxford Dictionaries an agent is "a person that takes an active role or produces a specified effect" (Agent, 2013) while a champion is someone "who vigorously supports or defends a person or cause" (Champion, 2013). Accordingly, the main difference between both definitions is a question of vigour whether the role or the support is simply active or rather vigorous. However, in respect of both visions it is primarily the subject that matters. Because, being an agent for visionary and independent expertise on the one hand, embodies some kind of an intangible long-term character. On the other hand, striving to be the champion for a subject that constitutes a contemporary and real challenge is not only more tangible, but obviously also more important. Or with the words of LtGen Wundrak:

Indeed, we have moved away from thinking that we are completely independent, somewhere in the clouds, in splendid isolation. We are now trying to liaise closely with AC Ramstein, with SHAPE<sup>107</sup>, with Brunssum<sup>108</sup>, with ACT; and we have slightly shifted the scope from long-term strategic topics 'in the clouds', to also include really tangible topics – something the JAPCC has partially already done in the past.

<sup>107</sup> Supreme Headquarters Allied Powers Europe (SHAPE) is located near the city of Mons (Belgium) and home of the Allied Command Operations.

<sup>108</sup> Brunssum is a town in the Netherlands and home of the Allied Joint Force Command Brunssum (JFC Brunssum), a NATO headquarters one level below SHAPE in the NCS.

Back in 2010 a decision was taken in the JAPCC to launch a review which was termed the *JAPCC Improvement Campaign* (JAPCC, 2011b, p. 12). According to Col Theuerkauf the campaign is aiming at “making the JAPCC more palatable to its Sponsoring Nations by convincing them to make greater use of it”. He further states that “virtually within the first five years since the JAPCC has been effective, Nations were not really aware of what to do with it”. However, not knowing how to utilize the JAPCC is one thing but, as both LtGen Wundrak and Col Theuerkauf state, the former JAPCC director, General Welsh, was more than surprised as he learned during a conference that a majority of the present Chiefs of Air Staff hadn’t even heard about the JAPCC, let alone their respective nation is part of it. However, LtGen Wundrak makes the point that the problem is rather to keep the Air Chiefs and the leadership of the Nations involved, so that they are able to make use of the JAPCC as “their instrument and tool for development, transformation, adoption and so on”. On the other side he highlights the challenge to get national HQs involved as they are “devoured by their day-to-day business”. Hence, the new vision represented an initial turn towards enhancing relevance in terms of content. However, delivering the content has since then been an ongoing challenge.

The second time the vision was proposed being amended was initiated by General Welsh at the Executive Working Group meeting<sup>109</sup> in March 2012 as he – presumably still displeased by the experiences he had made with the Air Chiefs – posed two questions concerning the extent of the JAPCC’s relevance and the kind of impact its work was having (JAPCC, 2013a). In the wake of both questions the JAPCC leadership launched an internal review process, based on a bottom-up approach that also included the Senior National Representatives (SNRs)<sup>110</sup> from all 17 SNs (Interview Wundrak). The review aimed at “understanding the state of JAPCC with regard to its mission as the Air and Space Power Transformation Agent for NATO” (JAPCC, 2013a) and revealed some key findings such as that the JAPCC “had lost touch with many [customers and] had shortfalls in organizational requirements and internal processes” (JAPCC, 2013a). As LtGen Wundrak states:

We must not sit back and wait for someone approaching us. Rather, we have to proactively work with our customers, the Headquarters, with the Nations. And that’s also challenging as it again calls for time and money and resources.

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<sup>109</sup> This meeting is comparable with a Steering Committee meeting. Details follow under section 5.3.2.

<sup>110</sup> These officers belong to the JAPCC and are part of the regular staff.

In other words, as the JAPCC stood to lose reputation and relevance, it decided to accept some constraints regarding its resource base and to go on the offensive in order to embrace new opportunities. This is, however, in any case better than wasting time and even more reputation.

The findings then led to two sets of strategic planning meetings which were to refine the JAPCC's strategic alignment. The meeting in turn brought about six results of which one was the recommendation to adjust the JAPCC Mission Statement and the Director's Vision. Both were then approved by General Breedlove, who had taken command as new JAPCC Director in August 2012, and became effective on 01 January 2013. The JAPCC comes now with the vision to be "NATO's catalyst for the improvement and transformation of Joint Air and Space Power; delivering effective solutions through independent thought & analysis" (JAPCC, 2013c). A catalyst is "a person or thing that precipitates an event" (Catalyst, 2013). As such the JAPCC strives not only to enhance transformation but also to focus on improvement – according to Col Theuerkauf, an aspect that has been faded out completely during the last eight years. As LtGen Wundrak points out:

The transformation hype under which you were able to subsume almost everything is more or less over. We are now trying to be more specific and precise by not just covering *transformation in the clouds* as a somehow hazy process.

As Col Theuerkauf further reveals, there were hardly any ideas of what *transformation of Air and Space Power* might look like. By contrast, under the aspects of improvement it is now much easier to generate output that is actually requested. As he argues: "In principle, improvement is to change the colour of a wall from green to yellow. However that doesn't change the room". To stay with his example: While changing the room would be a transformational step, changing the colour of the wall is obviously nothing more than modernization. According to Sloan modernization is "in the realm of evolutionary change and involves incremental upgrades through which an organization tries to improve its ability to do what it is already doing" (Sloan, 2008, p. 8). Thus, the aspect of modernization respectively improvement opens up for new opportunities which the JAPCC may embrace in order to stay relevant. Interestingly, with reference to the initial quotation of Osinga, modernization was actually the reason for establishing the JAPCC.

Whatever the case may be, a good example is the JAPCC Leadership Competence improvement training which aims at enhancing decision-making in chaotic environments and which is accessible also to non-military customers (NATO, 2013d). According to Col Theuerkauf "the

JAPCC comes more and more to the fore as it is able to provide services which, indeed, have relevant content – thus providing a real benefit”.

Moreover, the JAPCC, “as a team of multinational experts” is given the mission “to provide key decision makers effective solutions on Air and Space Power challenges, in order to safeguard NATO and the Nations’ interest” (JAPCC, 2013c). The term *effective solutions* was also covered by the older mission statement in a similar fashion. However, this time it is linked with *challenges* and *interest* in order to illustrate its bearing to the present. Moreover, the designation of the primary customer has been labelled *key decision makers* instead of solely ACT. This clearly indicates the JAPCC’s aim to be more responsive also for the demands from other customers.

On the other side, the mission statement does neither refer to content nor does it answer the question of how it could be operationalized. However, according to Col Theuerkauf, this is what it’s all about: “Currently we have been facing the problem to be primarily concerned with administration and organization instead of finally starting to deliver content.” As a consequence of this the JAPCC leadership identified six new and more specific Focus Areas to give guidance for the work of 2013 (JAPCC, 2013c). I come back to this point in the next section about Work.

Another output from the meetings was the initiation of an *Engagement Plan*, a special kind of “Promotion Tour or Road Show” as Col Theuerkauf labels these engagements. The idea behind the plan is to send a team of JAPCC personnel (from the leadership, SNRs and SME) to visit all 17 Sponsoring Nations as well as all NATO Headquarters at and above the component level (JAPCC, 2013a). During the visit the JAPCC team aims at exploring the customer’s individual interests on the one hand and to demonstrate the value of the JAPCC on the other hand (JAPCC, 2013b, p. 80). As Col Theuerkauf presumes, “initially nations may have underestimated the JAPCC because they considered it being independent and thus not ‘taskable’”. He further admits that nations were also discouraged by the process (Request for Support) by which they had to ask for support. LtGen Wundrak goes even a step further as he states that the inherent problem to establish a fertile collaboration between the JAPCC and its SNs was routed in the way of how communication was arranged:

Last year we figured out that the contact between some Nations and the JAPCC had been arranged by the [Senior Special Representatives] SNRs – or whoever was responsible – and stopped somewhere ‘in the bed of clay’ of Lieutenant Colonels and Full Colonels, meaning on the third or fourth level. The objective therefore was to breach it. And I think we have been successful in our first approach. However, the question remains how to

keep the leadership and the second level, precisely the division chiefs – who are almost as important as the Chief of Air Staff because they do the daily work – how to keep them in line (Interview Wundrak).

Hence, the engagements are also destined to spell out the Nations' challenges in the field of the improvement and transformation of Air and Space Power and to explore ways how the JAPCC may contribute to overcoming those challenges (JAPCC, 2013b). By early 2013, the JAPCC had already visited the Air Force Staff of five sponsoring nations as well as Joint Force Command (JFC) Brunssum and Air Command (AC) Ramstein.

According to LtGen Wundrak the JAPCC's overall intention is to identify potential customers that account for prospective projects within the JAPCC. This means that a project has to have a customer before the JAPCC is going to start working on it – and not the other way around.

However, this results in the awkward situation that every potential JAPCC project which cannot be assigned to a customer isn't a JAPCC project anymore (Interview Theuerkauf). As Col Theuerkauf points out very frankly: "You cannot do just what your customer would like you to do because this will bring us back to socialism in nothing flat. And socialism has come to an end at some point in history".

In summary it can be stated that within the last three years the JAPCC has been actively concerned with the alignment of its strategy which finally resulted in a substantial change of the Director's Vision and a completely new mission statement. This process brought about a change in scope and agility as the JAPCC is currently not only concerned with *transformation in the clouds* but also aware of the necessity to provide products and services that are related to contemporary challenges in the field of Joint Air and Space Power. Currently the JAPCC is trying to affect its environment and enhance the relationship with its main customers in order to mitigate the ongoing loss of relevance primarily for the Sponsoring Nations.

### ***Structure***

The structure of the JAPCC represents a combination of a hierarchy and matrix staff organisation, functionally organized but matrix-driven in managing projects. This is to support "free-thinking (out-of-the-box)" and avoid "stove-piping" (JAPCC, 2004, A 1-3). At the top of the hierarchy is the Director who is guiding the JAPCC from HQs Allied Air Command Ramstein. His on scene-representative in Kalkar, the Executive Director, appreciates the Director's overall influence:

It is a stroke of luck to have a three-hatted U.S. four-star general as Director who serves principally as Senior Airman of NATO and Senior Airman of the US Air Force and as Director JAPCC. This is a constellation that has enormous power. We would be indeed foolish not to make use of it (Interview Wundrak).

While the former RFAS was headed by a German Air Force General, this quote emphasizes the esteem, the German Luftwaffe showed for the US Air Force by providing them the Director's post. This became also evident at the first JAPCC Conference in 2005, as the then JAPCC Executive Director highlighted in his opening remarks the leading role of the United States in terms of capabilities and pointed out the need to "address the growing gap of operational capabilities between the United States and the other NATO member nations" (Schubert, 2005).

The quote, however, does also clearly point out the significance of having influence within the NATO Command Arrangements; influence which the former RFAS obviously did not had in sufficient degree.

The Executive Director, who is acting on behalf of the Director on all delegated issues, is supported by two Assistant Directors (OF-6) who are executing the on-site leadership, meaning the day-to-day operation. The Assistant Director Capabilities (ADC) is a bi-national rotational post, currently being held by an Italian Brigadier General who has taken over from a Dutch Air Commodore in 2011. The Assistant Director Transformation (ADT) was initially assigned to Great Britain but is currently being held by a Dutch Air Commodore. The Netherlands filled this post temporarily in September 2012 as a voluntary national contribution after it was vacant for almost one and a half year. According to Col Theuerkauf, Great Britain refused to nominate a replacement for the British Air Commodore who held that position from Mai 2010 until Mai 2011. According to Gen Wundrak the British have made so substantial cuts in their military personnel that they don't know how to manage their work. According to BBC News (2012), the Royal Air Force has to cut 5000 personnel by 2015 with up to 15 air commodores among them as part of the British Strategic Defence and Security Review announced in 2010. On the other hand Col Theuerkauf provides a more pragmatic explanation which is based on the Assistant Director's growing dissatisfaction as regards the content and the quality of work which finally was also a catalyst for launching the aforementioned improvement campaign (Interview Theuerkauf).

Furthermore, the Directorate includes the Director of Staff (OF-5), assigned to the USA, and his Support Staff. Finally, the JAPCC is one of only two<sup>111</sup> COE's that provide a liaison element to HQ SACT. The position which is fully integrated with TNB and currently<sup>112</sup> held by a US AF Colonel "has been invaluable to the JAPCC" (NATO, 2009c, p. 15) as it provides for explaining and promoting the JAPCC activities. Four years later in 2013, by contrast, TNB strongly recommends in its PAR<sup>113</sup> "a more effective use" of the liaison officer in order to "adapt more quickly to an ever changing NATO transformational environment" (NATO, 2013d, p. 2). The JAPCC self-assessment in the same document, however, allows also for a slightly more positive interpretation: "Without this face-to-face liaison, JAPCC's access and interaction with ACT would be considerably less" (NATO, 2013d, p. 16). Clarification is provided by Lt Gen Wundrak as he states: "Without offering criticism [...] our impression is that we are pretty much disconnected from ACT although we have a liaison officer on side" (Interview Wundrak). Following Lt Col Wundrak, the main challenge is to stay functionally connected because HQ SACT does not reflect a corresponding structure, focusing equally on Air and Space Power related issues. Consequently it is much easier to maintain and even enhance relevance where working relations are more specific and fertile such as with ACO or with AC Ramstein. By contrast, although a topic such as Air and Space Power beyond 2035 is relevant, in times of austerity it is obviously not suited to serve as a driving force. At the same time, however, TNB recommends a review of the various functional relationships the JAPCC maintains. As an example, TNB tentatively refers to "the relationship between the ACT-oriented COE and the ACO-oriented Allied Air Command Ramstein" (NATO, 2013d) by explicitly stressing that both organizations share the same commander. Of course, TNB is charged to coordinate the COE community in order to avoid duplication of efforts but as Col Theuerkauf notes: "Since TNB has grown somewhat bigger and gathered this coordination role they try to get a foot in the door and actually do a little bit more in respect of a real coordination".

Below the Directorate is "the heart of the JAPCC" (JAPCC, 2013a) which consists of 63 functional Subject Matter Experts (SMEs)<sup>114</sup>. While these experts are "finally the driving force behind the JAPCC" (Interview Theuerkauf), SNs are expected to provide highly qualified personnel in accordance with demands, defined in the corresponding job description. While the functional assessment of a potential new JAPCC SME resides in the competence of each SN

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<sup>111</sup> The CIMIC COE also provides a liaison officer to HQ SACT.

<sup>112</sup> From 2005 until 2008 this post was filled by the Netherlands.

<sup>113</sup> The term Periodic Assessment Report is described in section 2.1.2

<sup>114</sup> 63 SMEs are those officers who have a post in one of the six branches, including the BHs.

(NATO, 2009c, p. 9), his qualifications may serve as a yardstick for each nation's attitude towards the JAPCC. Following Col Theuerkauf there are three reasons for the contribution of personnel: First, a Tour of Duty within the JAPCC may serve as "a ticket in the box" for other multinational deployments to come. Second, to get someone out of the own personnel roster and finally, nations may send their best officers, keeping a very close contact going, in order to be able to exert influence and gain information. However, following Lt Gen Wundrak the JAPCC is competing with national assignments and as he admits: "Yes, sometimes you could have the impression [to be of lower importance]".

The SMEs are arranged in a matrix organization and administratively assigned to either the Transformation or the Capabilities Division. While the latter is arranged in four functionally aligned branches<sup>115</sup> with each branch headed by a Colonel either from the USA, Italy, Great Britain, or Germany, the former includes two Branches<sup>116</sup>, one headed by a Dutch and the other one by a German Colonel.

Following Col Theuerkauf the allocation of posts was done by a "pragmatic approach". On the one hand, the JAPCC preceded the RFAS and due to the "power of the factual" some posts were already assigned. On the other hand, it was also necessary to create new posts in order to attract nations to provide personnel. Moreover, while Centres of Excellence are not part of the NCS, this *flagging* (i.e. Flags-to-Post outcome) is also a result of established links which the aforementioned nations have had into the NCS. Thus it was presumed to be in a position to better entrench the JAPCC beside it (Interview Theuerkauf).

Posts above OF-4 level, however, call for further personnel commitments. For example, Sponsoring Nations who are manning OF-5 posts have to provide at the same time a minimum of four OF-3/4 staff officers (JAPCC, 2004, A-4). These additional officers constitute therefore not only higher costs but, as Lt Gen Wundrak points out, also an opportunity to produce much more input and thereby gain influence on specific issues.

The JAPCC offers 97 posts in total of which 76 posts are officer posts, 46 of them joint eligible. Top contributors in addition to Germany (23/25)<sup>117</sup> are the USA (13/14), Italy (12/12), and the Netherlands (8/8). Together they account for almost 61 percent all posts. By contrast, Greece has completely withdrawn its personnel (2 officers) and Great Britain fills only 2 of 7 posts. Also

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<sup>115</sup> *Combat Air (CA), Combat Support (CS), Combat Service Support (CSS), and Command, Control, Communications, Computers, Intelligence, Surveillance, Target Acquisition & Reconnaissance (C4ISTAR).*

<sup>116</sup> *Policy & Doctrine (PD) and Concept & Development (CD)*

<sup>117</sup> (filled posts / total number of bids)

Belgium currently fills only one of three posts and France, who originally had applied for two posts, reduced its commitment to just one bid, however, currently unfilled (JAPCC, 2013c).

While 81 posts (83%) were filled in 2009, their number went down to 71 posts (73%) by the end of 2012. According to the JAPCC's Annual Report of 2012, this reduction has had significant consequences for its ability in some key Air and Spacer Power areas such as Unmanned Aerial Vehicles. Moreover, the support sections and in particular Administration has been down at 50 percent manning for the second half of 2012 (JAPCC, 2010a, 2013a). On the other side, these two sections account for all 19 NCO<sup>118</sup> posts in the JAPCC together, so that personnel reductions primarily hit these support units instead of the SMEs sitting in the branches. Even though ACT holds the view that the Host Nation is supposed to provide the majority or even all personnel in first place, Col Theuerkauf is more than crystal clear as he states:

“From a strategic point of view it may be a case of a bridge too far [to call for more Host Nations Support] in these days. [...] Any claim stating Germany has to do more is obviously proposed by somebody who doesn't know what he is talking about. [Finally] it is all about solving a structural problem of which no one has a clue in which direction – just as for the JAPCC”.

Admittedly, sufficient manning is a critical parameter but it should be noticed that 11 SNs (i.e. almost two-thirds) have filled their posts by 100 percent. On the other, side nine of them are accounting for just one or two posts, resulting in a total of not more than 12 filled posts.

With exception of Great Britain, the main challenge is therefore not so much to fill assigned posts but to attract potential new members<sup>119</sup> and convince the current SNs to raise their bids. This is difficult because SNs at the same time have to reduce their defence budgets. As a consequence, as Lt Gen Wundrak notes by referring to Great Britain, “work for NATO becomes secondary and remains undone”. Again Col Theuerkauf is crystal clear as he raises two questions: “What kind of JAPCC do nations want to afford? Do they want a multinational JAPCC or rather a German JAPCC with a multinational contingent?” At this point if not before relevance matters.

Finally I will elaborate on the JAPCC's Steering Committee. Normally a SC is charged to decide on all essential aspects of governing a COE. In case of the JAPCC, however, the SC is just

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<sup>118</sup> Non-commissioned officer

<sup>119</sup> Not only NATO countries but also to invite selected Partner Nations such as Australia, Austria, Finland, New Zealand and Sweden. (JAPCC, 2013c)

supposed to give strategic guidance and advice to the Director. This is because the SC is supported by the already mentioned Senior Resource Committee, which constitutes a unique construct among German hosted COEs. Moreover, the SC is responsible to prioritise demands placed on the JAPCC and to give direction in respect of the relationships between the JAPCC and its customers. In addition to the JAPCC's executive leadership<sup>120</sup>, the SC actually consists of the Chiefs of Air Staff<sup>121</sup> (CoAS) from all 17 SNs and is scheduled to meet twice a year. Voting rights are only with the SNs and decisions have to be made unanimously (JAPCC, 2004, Annex C). So far the theory but the praxis is completely different. By the end of 2012 not a single SC meeting was performed due to as scheduling difficulties. Alternatively the former JAPCC Director has initiated in 2009 an *Executive Working Group* (EWG) which is composed of senior representatives from all SNs (JAPCC, 2013c). The EWG aims at providing the SNs with the opportunity to gain information by reviewing past and discussing present and future projects within the JAPCC Programme of Work (JAPCC, 2011b, p. 2). After the first meeting<sup>122</sup>, for instance, the Executive Director at the time<sup>123</sup> declared the EWG “a major step towards developing further transparency and visibility of the work of the JAPCC” (JAPCC, 2010b) and expressed his opinion that the SNs' decision to set up the JAPCC was vindicated.

Furthermore the EWG is also supposed to offer nations an opportunity to give guidance and direction from their perspectives; or to put it with the words of the Executive Director at the time<sup>124</sup>: “The JAPCC relies upon key strategic guidance to maintain its relevance [and] the EWG guaranteed the Centre remains connected to its SNs” (JAPCC, 2012, p. 2). For example, during the second EWG meeting<sup>125</sup> SNs stressed that “shrinking defence budgets and financial constraints across NATO would only serve to increase the importance placed on the work that could be done by centres of excellence” (JAPCC, 2011c, p. 63).

However, while both former Executive Director refers to the EWG as a major success, LtGen Wundrak states that the EWG similar to the SC has never really worked properly. Nevertheless he claims that “the function of the SC principally must not be undermined”. Following Col Theuerkauf “a Steering Committee is simply too ponderous and the JAPCC as a multinational organization too far away from the Air Chiefs” as it could exercise influence over the work of the JAPCC and its content. He advocates the current ways of how decisions are being made by

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<sup>120</sup> Director and Executive Director

<sup>121</sup> The SN may also appoint a national Air Flag Officer representing their national interests.

<sup>122</sup> on 23 February 2010 in Kalkar

<sup>123</sup> Lt Gen Friedrich W. Ploeger

<sup>124</sup> Lt Gen Dieter Naskrent

<sup>125</sup> lasting from 14 - 15 March 2011 in Kalkar

the so called *Project Board*<sup>126</sup> which consists of both Assistant Directors and the Director of Staff (Interview Theuerkauf). However, while Col Theuerkauf notes that the board has proven to be a flexible tool regarding decision making on projects, he views the board at the same time also very sceptically due to its overriding power. This is because the board can more or less easily drop ambiguous projects even though the majority of Branch Heads and SNRs are supporting them. As he admits: “This is a very critical factor, leading to disputes again and again”. Although a weekly scheduled leadership meeting<sup>127</sup> is to prevent or mitigate these disputes, most decisions are taken by the Directorate unanimously without involving the Subject Matter Experts.

### **Work**

To pursue strategy and achieve specific goals, the JAPCC as well as any other organization has to perform tasks. The JAPCC has, therefore, developed what is called the Strategy-to-Task Framework in order to address the relationship between mission priorities on the one hand and the JAPCC Programme of Work on the other hand. Projects within the POW derive from a specific JAPCC Focus Area. These areas are intended to support the mission priorities in order to finally meet the customer’s objective. According to the JAPCC, the simple logic behind this construct is: “Ultimately, by serving our customer’s needs, the JAPCC transforms NATO Air & Space Power” (JAPCC, 2012, p. 18).

Before I come to discuss the POW against the Strategy-to-Task Framework I have to make the point that the discussion is primarily concerned with the questions of how and why this work is performed as opposed to include details about its specific content. Otherwise, this would inevitably exceed the limits of this study.

The first POW was agreed upon in June 2005 by an official Letter of Agreement between the Deputy Chief of Staff HQ SACT and the JAPCC’s first Executive Director. The POW was viewed as a “key vehicle” for the overriding objective to further develop “the effective and efficient use of joint NATO air power” (JAPCC, 2005, p. 43) – an objective that was also reflected in all mission statements until 2012. In order to accomplish its mission the JAPCC exploits the knowledge of its Subject Matter Experts on a strategic and operational level. In this way, the JAPCC seeks to provide what is defined by the mission statement as “independent thought, analysis and solutions” (JAPCC, 2012, p. 2) and finally expressed as output in NATO forums, journals, reports, studies, seminars and conferences.

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<sup>126</sup> The Project Board is, however, not covered by and described in the Operational MOU.

<sup>127</sup> includes the Directorate and all six Branch Heads (Interview Theuerkauf)

However, all work needs to be prioritized in order to enable resource allocation in a way that is compliant with the majority of demands. As a former Branch Head of the JAPCC, Colonel Hans-Jürgen Wolf, pointed out already in 2005: “The JAPCC is capable of delivering required output to specific customers and will, depending on the prioritisation of work, also be self-starting and proactive as a transformational THINK TANK<sup>128</sup>” (Wolf, 2005, p. 33). This means that while being responsive to external demands, the JAPCC is willing to further its mandate as perceived to be best in order to avoid uncertainty.

According to Col Theuerkauf the JAPCC differentiates between three items in order to prioritise work: projects, activities, and tasks. As projects have top priority, most resources are allotted to this kind of work. They have a limited time span, normally four to eighteen months, and form together with activities the annual POW (JAPCC, 2013a, p. 5). Activities are frequently recurring and comprise the lead or participation in working groups or the custodianship for NATO publications. They are conducted in accordance with available resources and capacities. For instance, the POW 2012 included 12 projects and 108 activities (JAPCC, 2013d) and projects for 2013 include nine projects with two more in the definition process<sup>129</sup> (JAPCC, 2013c). This is a quite eclectic field of work for 63 SME – even when all posts are filled. Thus, the JAPCC seeks to streamline and focus the POW in the future in order to stay excellent (NATO, 2013d, p. 7). Finally, tasks consist of ad-hoc requests for support that are being decided upon by either the weekly Leadership Meeting or the Project Board in accordance with available resources and the presumed benefit which could be gained. Additionally, a monthly POW meeting has been created recently as a means to evaluate whether a project is on course in terms of resource allotment and to discuss potentially new projects. Although the approval of the POW still remains with the SC/EWG their influence is rather superficial as most of the work has already been done by the JAPCC – or as LtGen Wundrak explains:

“The Senior National Representatives are supposed to deal with the POW on a day by day business. Accordingly, Nations have the right to intervene by their SNRs. However, this has not been a problem in the past”.

On the other hand, Col Theuerkauf illustrates a floating problem as he points out that it is difficult to establish cooperation with national centres for air power development – such as the German *Zentrum für Weiterentwicklung der Luftwaffe (ZWELw)* – as long as “the intersection of common projects is virtually zero because of a misunderstanding in terms of transformation”. On

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<sup>128</sup> emphasis in the original

<sup>129</sup> Project Definition Report (PDR)

the other side, LtGen Wundrak provides an example about a recent study on Joint Personal Recovery that has been conducted at the German Air Force Command and the JAPCC at the same time. While emphasising the advantage of his three-hatted command functions, he confidently indicates that both studies have, “of course, not [been conducted] in complete isolation”. Both examples provide evidence for what Col Theuerkauf is eager to point out with a view to initiating projects: “It is absolutely crucial that we start to improve the content of what we are doing. Otherwise our support from SNs will *go down the drain*<sup>130</sup>”.

But work within the JAPCC is not only prioritised in respect of different projects. The JAPCC has also established five general Mission Priorities. As a result of the JAPCC Comprehensive Plan for 2011 these priorities, however, have changed order (JAPCC, 2011b, 2012). While the priority “develop and champion innovative visions, concepts and solutions” was on top of the list, it has been moved down to the third place. Instead, the category “provide high-quality and timely customer support [...] to inform and enable decision-makers” has gained top priority as opposed to being second to last before. For example, the project Joint Integrated Air & Missile Defence has gained prominence as opposed to the project Air and Space Power beyond 2035+ which was initiated in 2011 and finally cancelled in March 2012 as it was not possible to identify a sponsor (i.e. a customer ) for that project and resources were scarce (JAPCC, 2013a). Col Theuerkauf however, who was concerned with that topic, openly states that he was not really amused about that decision. While it is of utmost importance to produce content that is requested by customers in order to be relevant, “not having a customer doesn’t mean that the issue isn’t important. And who else is going to think about that issue?” (Interview Theuerkauf). As he further admits:

“Currently we are in a situation where we have to discover ourselves – how far we can go; how far do we have to go; how long does it make sense to go on; and even the fear on acting of our own courage. [...] But if we are afraid to make decisions and avow for them, what will happen then? We are independent!”

Moreover, the category with formerly lowest priority “contribute [...] expertise to Alliance decision making processes through active leadership and participation in NATO committees, working group, and fora” is now on second place. All activities in relation to chairmanships, custodianships, or just participation in NATO steering bodies account for this category.

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<sup>130</sup> Emphasis by interviewee

Altogether, this indicates how the strategic realignment assumes shape on the operative level. However, since *customer support* presupposes customers in first place, LtGen Wundrak openly admits that SNs have rather taken a back seat regarding their relevance as customers in recent years. On the other hand, the year 2009 was already characterised by an increasing engagement between the JAPCC and ACO “in delivering effects focusing firmly on current operations” (JAPCC, 2010a, p. 1). Thus, ACO provided the JAPCC with the chance to discover new opportunities. Following Col Theuerkauf Force Protection is such a classic example. The Subject Matter Expert who is concerned with that topic is on permanent duty – NATO wide. As he notes:

“That’s a hot topic, where we are obviously meeting the pulse of time. [...] And that is, in fact, what nations demand from the JAPCC. [...] and we had great influence in NATO’s Force Protection and Counter-IED initiatives. That was then the direct result.”

At least since 2011 the JAPCC has not only been aiming at finding customers for their work but also to get in contact with customers as they are in the initial phase of framing their projects. This is to ensure that the JAPCC is involved in potentially new projects as soon as possible. Moreover, this is to avoid separation and thereby uncertainty on the relevance of work in the aftermath; or to phrase it with LtGen Wundrak: “The JAPCC doesn’t want to make something in isolation [...]. We are rather striving to take part in the whole process.”

It is also striking that the JAPCC has changed the wording in its annual report. While all reports until 2010 include a heading “How we Accomplish our Mission”, it has been substituted in 2011 by “What we do”, supplemented by a second heading “Focus Areas”. Although the JAPCC has not really changed the way how they work, the amended wording, however, illustrates first and foremost the new approach of how the JAPCC is going to address what they intent to do and why. Therefore the JAPCC has introduced five Focus Areas<sup>131</sup> for 2011 and 2012 which are informed by both external (e.r. NATO, Nations, Academia and Industry) and internal (e.g. Directorate, EWG, SME feedback). For the year 2013, however, the JAPCC leadership identified six new, more narrowly defined Focus Areas<sup>132</sup> of which Education and Training is on top of the list and Support to Current Operations on position three. This means at the same time that the primary customer has changed from ACT to ACO – or to put it more bluntly, from transformation to operations.

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<sup>131</sup> including Space, Missile Defence, Air C2 in the new NCS, Air & Space Global Commons, Pursuing Cooperation in the Air Domain

<sup>132</sup> Education and Training; Space; Support to Current Operations; Future of Warfare; Unique Air Enablers; and Air Power Development (JAPCC, 2013c)

*Output*

### **5.3 Conclusion - Relevance or Misunderstanding**





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**Interview Guide for a semi-structured interview**  
**(Guiding questions)**

**I. Evolution of COES**

**(1) How did you learn for first time that Germany is going to participate in the establishment of NATO COEs?**

**(2) How did the idea of establishing the (...) COE evolve?**

- *actors and intent*
- *national and international support and sponsoring*
- *necessity and capability gaps regarding NATO*

**(3) How was the idea implemented afterwards?**

- *Drafting of MOUs*
- *Significance of the „Mission Statement“*
- *Structure of the posts*

**II. Organizing and operating a COE**

**(4) What are the essential tasks you primarily have to deal with as a (function)?**

- *in terms of decision-making*
- *level(s) of interaction*
- *involvement in the „Programme of Work“ (POW)*

- *filling national posts*

**(5) Are there criteria to prioritize the POW? (How is that done? / Why not?)**

- *„Customer“ influence*
- *consent making in case of dissent*
- *influence of ACT – administrative vs. regulative*

**(6) How would you describe in your own words the German engagement regarding the ROI (Return of Investment)? What is the “bang for the bucks”?**

- *examples*
- *national evaluation of objectives (yes/no - how/why not)*

### **III. Future / Smart Defence & Connected Forces Initiative**

**(7) To what extent are the expectations of COE customers satisfied by the product/service which is delivered/ distributed by the COEs?**

- *Room for improvement*

**(8) How does the (...) COE contribute to both initiatives with regard to the contents?**

- *Opportunities and limits in the future*
- *National focus*

**(9) What kind of influence/effects on the COEs do both initiatives have when it comes to their implementation?**

- *National coordination*

### **IV. Closure**

**(10) Do you wish to make any additional comments or any further remarks?**